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April 18, 1960

RAILWAY AGE *weekly*



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on today's railroads**

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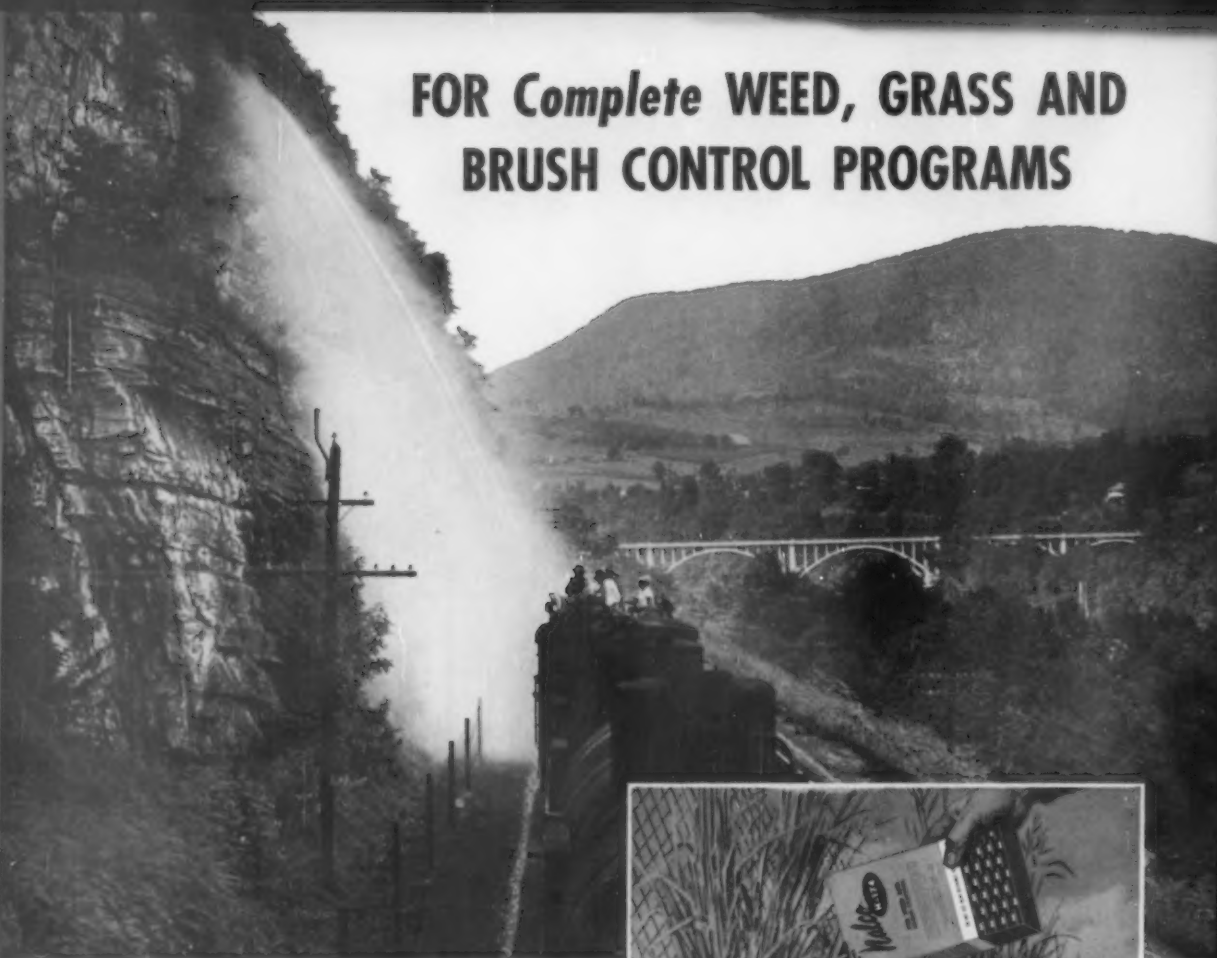


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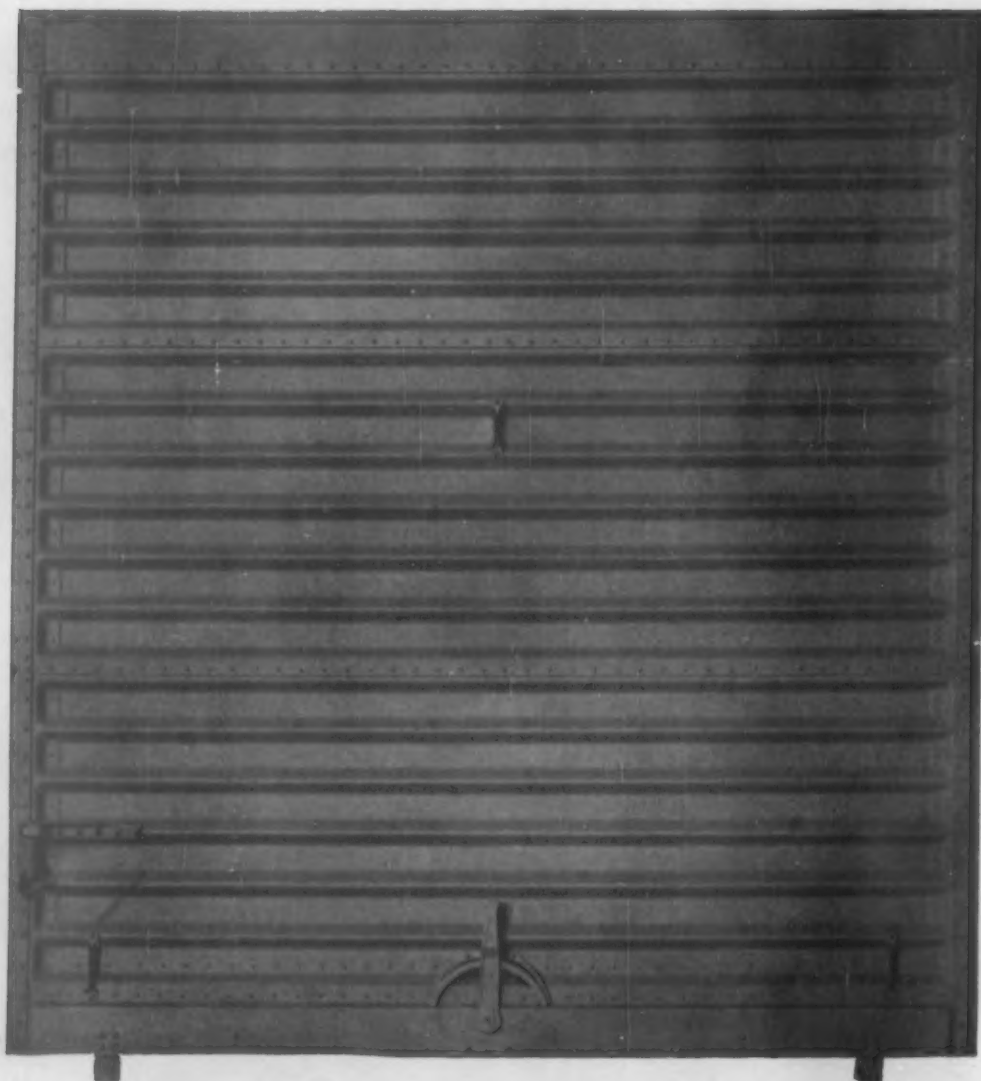


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Featherbedding fight draws firep. 9

Labor Secretary Mitchell has proposed a "no-deadline" study of the work rules problem. He thinks the issue will have to be settled away from the "nerve-wracking" atmosphere of the bargaining table.

Cover Story—Movies aid sales and trainingp. 14

Many managements have found that visual presentations succeed where words alone may fail. Photography has been used to help sales promotion, in loss and damage prevention work, and to train employees.

How \$1.4 billion was spentp.18

A breakdown of expenditures made by Class I railroads in 1959 for fuel, material and supplies.

Cover Story—Hotbox detector reduces setoutsp. 23

The Clinchfield's detection equipment near Fort Blackmore, Va., has reduced car setouts by almost half. Because the detectors are 71 miles from the recorder, it is necessary to transmit the heat signals by carrier.

GN tests new technique for bulk ladingp. 26

It's based on fluidization, and is used for transporting fine granular material, such as flour, sugar or starch. A test car has been in service since early this year.

Cover Story—New Haven bridge goes up fastp. 38

New England's first pre-stressed, pre-cast concrete bridge was completed just seven weeks after the first pile was driven. The bridge is in Cedar Hill yard, cornerstone of the New Haven's freight operations.

New TOFC breakthroughs seenp.43

U. S. Freight's Morris Forgash predicts progress this year toward faster freight schedules, more combined freight-passenger service and closer study of equipment standardization.

Is piggyback standardization possible?p.48

John E. Wightman, general manager of Trailer Train, outlines six "musts" for a standard piggyback car.

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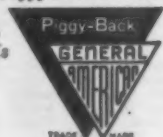
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Week at a Glance

Current Statistics

Operating revenues	
2 mos., 1960 . . .	\$1,563,389,022
2 mos., 1959 . . .	1,532,213,474
Operating expenses	
2 mos., 1960 . . .	1,254,520,883
2 mos., 1959 . . .	1,253,755,076
Taxes	
2 mos., 1960 . . .	168,158,367
2 mos., 1959 . . .	153,091,379
Net railway operating income	
2 mos., 1960 . . .	85,713,645
2 mos., 1959 . . .	75,670,278
Net income estimated	
2 mos., 1960 . . .	55,000,000
2 mos., 1959 . . .	42,000,000
Average price railroad stocks	
Apr. 12, 1960 . .	95.24
Apr. 14, 1959 . .	111.03
Carloadings, revenue freight	
13 wks., 1960 . .	7,577,596
13 wks., 1959 . .	7,557,753
Freight cars on order	
March 1, 1960 . .	46,323
March 1, 1959 . .	28,789
Freight cars delivered	
2 mos., 1960 . . .	7,900
2 mos., 1959 . . .	4,426

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The Action Pagep. 54

Diversify . . . or stagnate—Railroads must keep pace with the times by diversifying their operations. Objections would come only from their competitors, who now enjoy a politically protected monopoly.

Is Mr. Laney out of step?—Mr. Laney, local BLE chairman at Birmingham, says "fireman off" should be accepted as a long-range program. His point of view may well be shared by thousands of his fellow railroad union men.

Short and Significant

February's net income

of Class I railroads is estimated at \$28,000,000—up \$6,000,000 from February 1959's \$22,000,000, according to the AAR. Estimated net for this year's first two months is \$55,000,000, an increase of \$13,000,000 above the year-earlier figure. Thirty-seven Class I roads failed to earn their fixed charges in this year's first two months. Rate of return for the 12 months ended with February averaged 2.76%.

All-piggyback through train service . . .

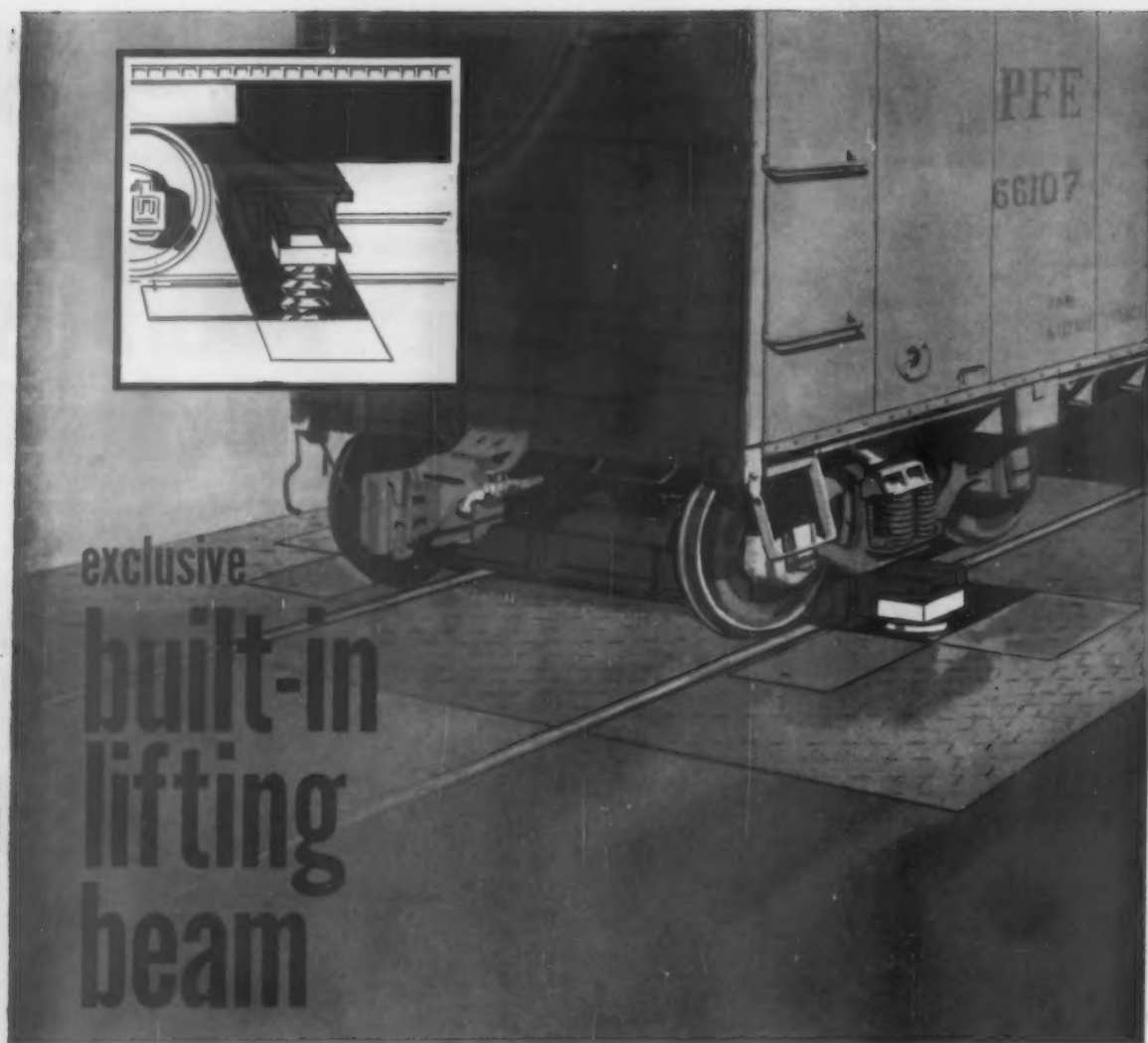
between Buffalo and Chicago—via southern Ontario, Detroit and Grand Rapids, Mich.—was inaugurated last week by C&O. Fourteen motor carriers are participating in the new Plan I service.

The BLE got down to statistics

last week in its effort to prove a case for a wage increase. Brotherhood testimony before the arbitration board was intended to show that worker productivity has increased, but wages have not kept pace with rises in compensation in other industries.

A National User Charge Commission . . .

to create and administer a program whereby commercial carriers would pay fully for their use of government-provided transport facilities has been proposed by the AAR. The proposal was made to the Senate Commerce Committee's transport study group. It is the second of four special papers which the association is submitting to the group along with its general presentation calling for removal of all inequities in the federal regulatory setup. First of the special papers calls for repeal, or extension to railroads, of the so-called bulk-commodity exemption which leaves water transportation of commodities in bulk unregulated (RA, April 11, p. 39).



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WORK RULES STUDY is recommended by Labor Secretary Mitchell (foreground) as brotherhood chiefs look on.

L. to R., J. A. Paddock, ORC&B; N. P. Speirs, SUNA; H. E. Gilbert, BLF&E; Guy L. Brown, BLE; W. P. Kennedy, BRT.

Featherbedding Fight Draws Fire

► **The Story at a Glance:** Secretary of Labor Mitchell and the AAR had differing views last week after the Secretary, in effect, advised the carriers and the brotherhoods to settle their work rules dispute someplace else than at the bargaining table.

The implication was strong that the industry should adopt a program similar to that by which the steel industry is supposed to dispose of its rules problem—through joint labor-management study, over a period of time and in an atmosphere free of bargaining deadlines.

The AAR, however, came up with the reminder that the carriers suggested appointment of a commission to study the problem more than a year ago. But, they noted, the unions rejected the proposal, Secretary Mitchell didn't endorse it and eventually President Eisenhower rejected the request.

The railroads' efforts to modernize their work rules came under fire twice in two days, at the operating brotherhoods' institute on labor-management problems April 7-8 at the University of Iowa.

Keynoter Guy L. Brown, grand chief of the BLE, led off with an attack on management's method of approach and a plea to labor to overcome its "resentment. . . [and] embark on a course of more thoroughgoing cooperation with railway management."

Then Secretary of Labor Mitchell,

principal speaker at the institute, came on. Suggesting that the nation's newspapers are a "very poor place in which to negotiate," Mr. Mitchell proposed that the work rules problem be assigned to study outside the processes of the Railway Labor Act. He hailed the agreement reached in the steel industry, which provides for such a joint labor-management investigation and, in addition, creates a "human relations research" committee.

AAR response was quick and sharp: "We are sorry the Secretary did not hold the same view 14 months ago when the railroads first proposed an impartial presidential commission to study the featherbedding work rules problem which he now says is too big to be settled at the bargaining table."

The Secretary put it this way, in explaining his position:

"The objective of efficient operation of the national economy will not be met by any attempt to change at a stroke or the bang of a gavel work habits built up over many years and through many bargaining sessions. . .

"The objective of a forward, vigorous union movement will not be achieved by seeing in a status quo the answer to every challenge of change. Certainly there are practices in many industries today that are no longer purposeful, and there must be alternatives for them and the people they involve. And I doubt that such alternatives can be devised at a bargaining table, among

people faced with a nerve-racking deadline and in an atmosphere of tension and contention."

Referring specifically to the railroads, Secretary Mitchell commented that many industry problems "cannot—and should not—be solved while both parties are rushing toward a deadline. This industry has benefitted for many years from the provisions of the Railway Labor Act, a law that keeps alive the concept of voluntary action and that has worked reasonably well throughout the years. . . But there are some problems in the industry that can be finally and successfully solved within the framework of good labor-management relations, but outside the law with its sequence of deadlines."

The Secretary said it's possible consideration may be given to modernizing the 34-year old act. This, too, he commented, should be done by labor and management in cooperative fashion.

In addition, he suggested that labor and management might want to look together at the "antiquated regulatory powers of the ICC." In order to produce a healthy industry, he said, the nation will "have to abandon archaic regulation. . . which government has foisted on the industry" and labor and management could "bring a joint voice to bear on this."

Earlier, BLE Chief Brown had called for labor support for similar action. In a deft mixture of militancy and states-

(Continued on page 16)

Midwest Transportation Map

► **The Story at a Glance:** Merger-minded railroads are in the process of redrawing the transportation map of the upper Midwest. With only one or two exceptions, every major road operating west and northwest out of Chicago is in one stage or another of merger and merger study. The trend is even more pronounced at Minneapolis-St. Paul.

If every consolidation makes it from study through to actuality, six major systems will be operating in territory now served principally by about a dozen roads.

This year could be the one in which railroad consolidation ceases to be a novelty. N&W and Virginian have already made it to the altar. An Erie-Lackawanna union has an ICC examiner's blessing. Santa Fe and PRR have assumed control of TP&W. Soo-

Wisconsin Central-DSS&A are steaming toward merger with little expectation of trouble.

Perhaps most significantly, there's more than a hint of action on three major midwestern consolidations this year.

C&NW's purchase of M&StL (RA, April 11, p. 7) goes before the stockholders of both roads in separate special meetings set for June 28.

Full-scale engineering, legal and financial studies of Rock Island-Milwaukee merger are expected to be completed later this year.

And, according to Great Northern, something definite may develop this year in the long-studied GN-NP-CB&Q-SP&S consolidation. Terms of exchange got a thorough probing last year. It's "regretted that progress has been slow," GN comments, "but the problems involved are complex. Tan-

gible results are hoped for in 1960 since, in addition to the long-standing joint interests of the lines, the opportunities for economies and improved service make consolidation very desirable."

In other areas, merger of ACL and Seaboard is still an active issue; consolidation (in some manner) of major New England roads rates attention; N&W-Nickel Plate marriage may be decided by year's end; and C&EI is still apparently under study by MoPac.

Most of the attention last week, however, focused on directors' approval of the purchase of M&StL by North Western. If stockholders and the ICC approve, C&NW will buy the smaller road for \$20,929,920—\$3,488,320 in cash to be paid at closing and \$17,441,600 in assumed liability on 6% mortgage bonds to be newly created by M&StL on its properties. North West-

Watching Washington *with Walter Taft*

• **A WAGE INCREASE** of one cent per hour, effective May 1, now seems in prospect for railroad employees working under agreements with escalator clauses. Though current wage movements have been under way since last November, the escalators of the old contracts are still in operation. That's because the contracts are on the usual pattern, having provisions which keep them fully in effect until successor agreements take over.

THE ESCALATOR CLAUSES are tied to the Bureau of Labor Statistics' cost-of-living index. The September 1956 index of 117.1 is the base, and up or down adjustments of one cent per hour are required for each half-point change from that figure.

THE MAY 1 ADJUSTMENT will be determined by March's index, due the latter part of this week or shortly thereafter. It is not expected to be much different from February's 125.6. That would put it 8.5 points above the 117.1 base and thus build up the escalator-clause increases to 17 cents per hour, i.e., one cent in addition to the 16 cents already provided by five previous increases.

UPWARD MOVEMENT of one-half point from this February figure would call for a raise of two cents per hour. On the other hand, no raise would be due if there were a downward movement of as much as one-tenth of a point. To provide a one-cent cut, however, the drop would have to be six-tenths of a point—to 125.0.

• **RECOMMENDATIONS** of the transport study made in the Department of Commerce comprise what Commerce's undersecretary for transportation calls a program "to solve long-standing problems, or to reconcile conflicting interests." That's what the undersecretary, John J. Allen, Jr., said in an Oakland, Calif., address last week.

A REPORT ON THE STUDY, with 78 recommendations, was submitted to President Eisenhower by Secretary of Commerce Mueller last month (RA, March 21, p. 31). The President had asked that the study be made, but failed to endorse the recommendations when he sent the report to Congress and other interested government agencies.

UNDERSECRETARY ALLEN'S SPEECH at Oakland was his first comprehensive public discussion of the report and its recommendations. Many of the latter are controversial, such as the calls for more carrier rate-making freedom and for user charges on publicly-provided transport facilities.

HEADING INTO SUCH ISSUES, Mr. Allen said, framers of the report were not unaware of the theory that decisions on public policy should be made by getting rival interests together and reaching a consensus of their positions. Rejecting that approach, "we based our thinking on the public interest," the undersecretary explained.

Changing

ern is purchasing all property, equipment and assets of M&StL and not the corporation itself. M&StL will continue as a corporate entity, with a different corporate name.

Comment at M&StL's annual meeting April 12 indicated that the company will seek to purchase an established business or work out a merger. It's reported that sale of rail operations will produce a tax loss leading to a cash recovery of about \$3,000,000 if the sale is completed in 1960. The sale also would produce a tax loss carry-over estimated at between \$20,000,000 and \$30,000,000.

'Homecoming' for Heineman

It will be, in a sense, homecoming for C&NW Chairman Ben W. Heineman, whose real debut in railroading came in May 1954 when he led a successful proxy fight for control of M&StL. As chairman of the executive committee, he headed M&StL until 1956, then moved in as chairman of C&NW. Present M&StL executive committee chairman is Max Swiren, former law partner of Mr. Heineman in Chicago.

M&StL reflects a number of Heineman innovations—and the purchase by North Western reflects a comment made by Mr. Heineman early in his tenure with M&StL: "The possibility of merger," he said then, "is very much on our minds" (RA, June 28, 1954, p. 65).

Top-level M&StL personnel also has undergone considerable change over the past six years. Three of the top six officers—President A. W. Schroeder, Vice President — Operations W. P. Coliton and Vice President — Traffic J. R. Sullivan—all joined the company after 1954.

Present plans call for C&NW to absorb M&StL and operate its lines as a separate division, probably under the M&StL designation.

Combination of the two roads will bring together two carriers which have started down the consolidation road before—and never completed the trip, so far as a major merger is concerned.

North Western and Milwaukee were once deeply involved in consolidation talks, but studies were dropped after Mr. Heineman came to C&NW. M&StL was also linked, in a preliminary sort of way, with Milwaukee. But M&StL's big effort came in its unsuccessful bid to acquire control of Toledo, Peoria & Western. The road took its case all the way to the U. S. Supreme Court and lost, and TP&W is now the property of Santa Fe and Pennsylvania.

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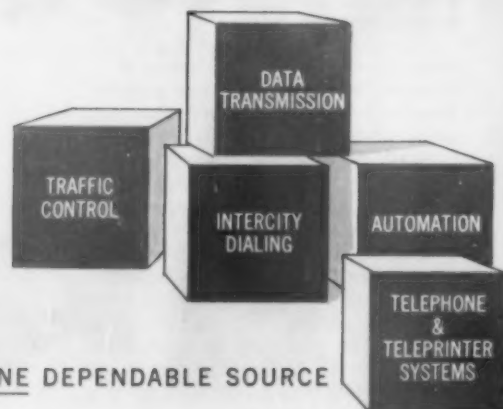


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How Movies Can Boost

► **The Story at a Glance:** Photography is getting new emphasis from industry generally. Managements are finding visual presentations—especially motion pictures or film strips or slides—succeed where words alone sometimes fail.

Industrial photography on railroads isn't new, but it isn't widely recognized as an all-department tool either. Here's how one road—the Frisco—has developed a professional photo staff to cover a wide range of activities. Here, too, are some of the approaches other major film users are taking—and a few of the ideas railroad photographers talk about when the conversation swings to future uses of film.

Frisco's public relations department doesn't look like a Hollywood-type operation—but PR-produced motion pictures are a significant part of the department's service to the railroad.

The staff is small, but it's developed along unique lines: All three members are professional photographers, skilled with both still and motion picture cameras. Staff work ranges from dramatic sales promotion films to highly technical industrial photography.

In the past year Frisco has produced striking motion pictures of both types: color films telling the story of new-automobile piggyback; and a black-and-white tech film, shot with an ultra-high-speed camera, to show precisely what happens inside a freight car journal box under varying impact conditions.

Frisco PR cameramen were part of the scene throughout development of the new-car TOFC business (and Frisco itself was one of the first roads to offer the service). They filmed test runs, followed up with a film of the first St. Louis-Dallas movement and

capped the assignment with another and longer motion picture on the complete run.

First films gave the road the answers it wanted regarding quality of the ride the new autos would get. Later films provided a graphic sales tool, useful in selling manufacturers on the advantages of shipping new cars via piggyback. (The department also turned out photo reproductions of impact recorder tests comparing quality of ride in both TOFC and over-the-road movement.)

Some of Frisco's technical photography is just as dramatic as the sales promotion work—for example, the 30-minute black-and-white micromotion film on journal impacts.

Cameramen exposed 7,810 ft of film in four days' shooting, then edited it down to 1,080 ft of finished film. They came up with perhaps the most revealing study yet of impact on journals

FILM EDITING plays an important role in making sure final prints do an effective job.



Your Sales and Training Programs

equipped with stops and various types of lubricator pads. The job was one of the few on which PR had to supplement its own photographic equipment. The department rented a motor-driven Fastax 16mm camera and shot the impacts at 2,000 pictures per second (each picture is slightly smaller than a 16mm frame).

For most work, however, Frisco PR men can come up with their own equipment. Their gear includes two 16mm motion picture cameras, a motor-driven Cine Special and a Bell & Howell; two 4x5 Speed Graphics; one 4x5 view camera; one Rolleiflex twin-lens reflex; and one 35mm Exakta. Fixed facilities (at the road's St. Louis offices) include a print room, process room, studio and editing facilities. Motion picture film processing and sound work are contracted out.

Perhaps the biggest job the department has undertaken is a 25-minute, fully-narrated color film on loss and damage prevention, completed several years ago and since shown to SLSF employees and shippers throughout the territory.

Frisco spared no effort to make the film realistic. It lifted the roof from a new box car, then shot down into the car to show the effect of impact on a load. It impacted a grain box car, then zoomed in on the door area to show grain spilling onto the right-of-way. To demonstrate the force of a 10-mph impact, it sent a box car through a brick wall built across track.

Cost Saving Is Substantial

Even with the added cost of the special effects, the PR department estimates it produced the film for about half the direct cost of outside production. The same spread, PR representative B. J. Gaia indicates, would hold true on most of the staff's work.

In addition to the traffic, mechanical and loss and damage prevention films, Frisco's staff has also:

- Handled all the audio-visual needs of supervisory training classes—10x10 Viewgraph projection prints and 35mm slides.

- Made an instructional slide presentation with tape narration on the road's operating rulebook.

- Produced a film designed to orient

(Continued on page 51)



PLANNING A SCENE in advance of location filming is subject of this conference by Frisco Public Relation Representative B. J. Gaia (right), and photographers Clarence Berger (left), and Paul Sweet.

New Uses Ahead for Railroad Films?

Mixing the imaginative with the practical, railroad photographers look for new and expanded use of films:

- For presentation of an annual report. The film could be screened at stockholders meetings, shown throughout the territory and maintained as a graphic file of the road's development year by year.

- To promote industrial development by showing, via both aerial and ground shots, the pattern of development in an area or state, the land still available and relationship of sites to transportation facilities and utilities. One of the newest films in the field: Southern Pacific's "Industry on the Right Track," a 20-minute sound-and-color motion picture which tells how SP works with communities and industries in ID efforts.

- To help construct a more favorable corporate image through external-audience films showing what the company is, does and stands for.

- To put across a point of view—applicable perhaps to local-level public opinion development on legislative, regulatory or labor matters.

- For training purposes. Technological developments—new CTC, a new yard, new specialized cars or motive power—could be explained visually to (a) employees who will use or service the new equipment or facility; and (b) others in the company who may be affected less directly by its use.

Union Demands Top Carriers' Net

Take the entire net income for Class I roads last year, add another \$187,326,660 and you'll have enough to pay the cost—for one year—of the brotherhood demands now pending.

The carriers estimate the total calculable cost of the proposals at \$765,641,000—about \$1,010 per employee. It's more than the railroads have earned in any of the past three years.

Here's a breakdown on specific costs, by organization:

1. SUNA, 12% wage increase	\$ 5,783,000
2. BLE, 12% wage increase	41,591,000
3. ORC&B, 1.6% increase in average basic daily rates in effect October 1956 and 12% increase in rates so adjusted	18,215,000
4. BRT, 14% wage increase and holiday pay adjustments for yard service employees	115,800,000
5. Non-operating group, increased vacation benefits and holiday pay	98,386,000
6. BLF&E, 14% wage increase (daily earnings minima demand not calculable)	45,744,000
7. Non-operating group, extended hospital, medical, surgical insurance benefits for employees and dependents, free life insurance, 25-cent hourly wage increase (includes similar demands by United Transport Service Workers; extended hospital, medical, surgical insurance benefits for furloughed employees not calculable)	365,926,000
8. ARSA, \$50 per month increase, plus increases in vacation benefits and holiday pay, free life insurance, added medical expense insurance, bonuses, supplemental pensions and disability benefits	Not calculable
9. RYA, \$50 per month increase, plus increases in vacation benefits and holiday pay (cost of supplemental sickness insurance not calculable)	4,580,000
10. SUNA, free life insurance, increases in vacation benefits and holiday pay, shift differentials (sick leave benefits, revision of overtime rule, pay for jury duty and attending examinations and classes not calculable)	3,406,000
11. ATDA, 8% wage increase, extended hospital, medical, surgical insurance benefits for employees and dependents, increases in vacation benefits and holiday pay (extended hospital, medical, surgical insurance benefits for furloughed employees not calculable)	4,102,000
12. Demands for inclusion in basic rates of cost-of-living adjustment of 3 cents per hour effective Nov. 1, 1959	54,473,000
13. Payroll taxes on increase in labor costs	7,635,000
Total calculable costs	\$765,641,000
Increase in labor costs if extended to cover all employees (126 classes)	\$819,262,000

FEATHERBEDDING FIGHT

(Continued from page 9)

manship, he lashed management's rules revision approach and then called for "teamwork by railway labor, railway management and government at all levels to preserve and improve our transportation system."

He thinks it's "possible that revision of work rules can still be rescued from the pit into which it was thrown by the 'featherbedding' charges and the carriers' notices of last Nov. 2. . . . There are some sensible and fair-minded people on the other side of the bargaining table. The time may come when they are the dominant force in the industry, when it is their wisdom and counsel which will be listened to and which will shape overall policy."

"The work rules can be revised to put the railroads in a better competitive position if the carriers are willing to recognize and assume their responsibilities to their employees."

Chief Brown dwelt at length on the problems of collective bargaining and termed the carriers' conference committee arrangement "the most basic labor relations problem in the industry. . . . This setup over the years has resulted in increasingly greater government encroachment into the field of labor relations so that the present wage-rules structure about which the carriers so loudly complain was primarily shaped by the awards and recommendations of government-appointed boards."

Conference committees, he charged, "have found it more desirable to avoid the responsibility for making a majority decision and have shifted their responsibility to a government board which is then charged with creating chaos in the industry."

Chief Brown also had a charge to level at labor. "In all fairness," he added, "the operating organizations are not blameless in the breakdown of collective bargaining. . . . Jurisdictional rivalries have played a large part in permitting this situation to develop."

Working sessions at the institute took up most of two days. Among the highlights: A panel with Q&A from the audience directed at the five chiefs (BLE's Brown, BLF&E's H. E. Gilbert, BRT's W. P. Kennedy, ORC&B's J. A. Paddock, SUNA's N. P. Speirs) and economist Eli Oliver; a second panel featuring the organizations' public relations men (RLEA's Milton Plumb, BLE's Richard Murway, BLF&E's William Loftus, BRT's Lou Corsi); and a discussion of compulsory arbitration and its alternatives by John J. Flagler, program director of the university's Bureau of Labor and Management.



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How \$1.4 Billion Was Spent

Purchases of Fuel, Material and Supplies

Railways of Class I—Calendar Years
1959 and 1958

Item	1959	1958
FUEL:		
Bituminous coal	\$ 15,659,000	\$ 21,411,000
Anthracite coal	2,958,000	3,231,000
Fuel oil—Residual	11,722,000	10,976,000
Fuel oil—Diesel	347,120,000	324,925,000
Gasoline	10,427,000	10,338,000
All other (coke, wood, fuel for illumination)	4,165,000	5,046,000
Total fuel	392,051,000	375,927,000

FOREST PRODUCTS:		
Cross ties (treated and untreated)	43,761,000	39,271,000
Switch & bridge ties (treated & untr.) & timber	13,889,000	11,179,000
Lumber (equipment, rough and finished)	26,238,000	16,880,000
Other forest products	8,724,000	8,425,000
Total forest products	92,612,000	75,755,000

IRON AND STEEL PRODUCTS:		
Steel rail (new and second hand, except scrap)	55,879,000	41,953,000
Wheels, axles and tires	72,590,000	52,052,000
Frogs, switches and crossings and parts of same	23,573,000	14,050,000
Track fastenings, track bolts, spikes, etc.	38,117,000	34,716,000
Iron bridges, turntables & struct. steel, all kinds	4,322,000	7,101,000
Bar iron and steel, spring steel, tool steel, unfabricated rolled shapes, wire netting and chain, except light coil, boiler, firebox, tank, and sheet iron and steel, all kinds	30,850,000	19,120,000
Forgings and pressed steel parts for locomotives	1,111,000	3,264,000
Car forgings, iron and steel, and fabricated or shaped steel, for passenger and freight cars	37,813,000	24,077,000
Flues and tubes for locos. & stationary boilers	468,000	537,000
Bolts, nuts, washers, rivets, lag screws, pins & studs	8,586,000	5,975,000
Springs, helical and elliptical, all kinds for locomotives and cars ..	5,096,000	3,669,000
Locomotive and car castings, beams, couplers, frames and car roofs	69,110,000	52,112,000

Track and roadway tools, all kinds, including hand and power operated tools, miscellaneous roadway material and fencing. Motor, hand, push and trailer cars, and parts for same	16,420,000	13,852,000
Machinery and repair parts	20,348,000	18,456,000
Pipe, iron and steel, and fittings, all kinds	7,880,000	5,717,000
Hardware, all kinds, including nails	7,587,000	6,460,000
Hand & small machine tools, such as drills, taps, reamers, dies, chasers, including air tools & parts	10,960,000	9,118,000
All other iron and steel products, including pig iron, cast iron water pipe and culvert pipe ..	8,732,000	8,157,000
Total iron and steel products	419,442,000	320,386,000

MISCELLANEOUS:		
Cement, lime, plaster, bldg. brick & other bldg. matls. except cast iron water pipe and culvert pipe	7,317,000	7,148,000
Lubricating oils and grease; illuminating oil; boiler compound; waste	50,978,000	45,401,000
Non-ferrous metal and non-ferrous metal products	29,869,000	25,895,000
Ballast	19,444,000	16,942,000
Electrical materials including electrical material for Diesel locomotives	49,426,000	43,025,000
Stationery and printing	31,660,000	29,947,000
Commissary supplies for dining cars & restaurants	23,717,000	25,392,000
Rubber and leather goods	8,996,000	6,934,000
Glass, drugs, chemicals, including chemicals for timber treatment; painters' supplies	39,701,000	34,480,000
Arch brick for locomotives	178,000	237,000
Passenger car trimmings	11,888,000	8,510,000
Locomotive, train and station supplies	22,662,000	19,793,000
Interlocking and signal material ..	37,926,000	32,326,000
Telegraph, telephone and radio material	12,715,000	10,825,000
Air brake material	18,766,000	13,335,000
Standard & spec'l mechanical appliances for locos.	4,525,000	3,638,000
Automotive equip. & supplies, except diesel mat'l.	24,479,000	20,801,000
Diesel material not elsewhere classified	84,295,000	72,869,000
All other miscellaneous purchases	47,497,000	41,051,000
Total miscellaneous purchases	526,039,000	458,549,000
Grand Total	\$1,430,144,000	\$1,230,617,000

Source: Reports of the carriers to the Bureau of Railway Economics.

BLE Suspends Local Chairman Laney

Local Chairman J. C. Laney has, in effect, been put on ice for two years, so far as holding office in the Brotherhood of Locomotive Engineers is concerned.

Grand Chief Guy L. Brown suspended Mr. Laney last week, and will take his case before the next Engineers' convention—in 1962. Reason for the suspension: Mr. Laney, a local chairman on the L&N, allegedly failed to answer Grand Lodge queries relative

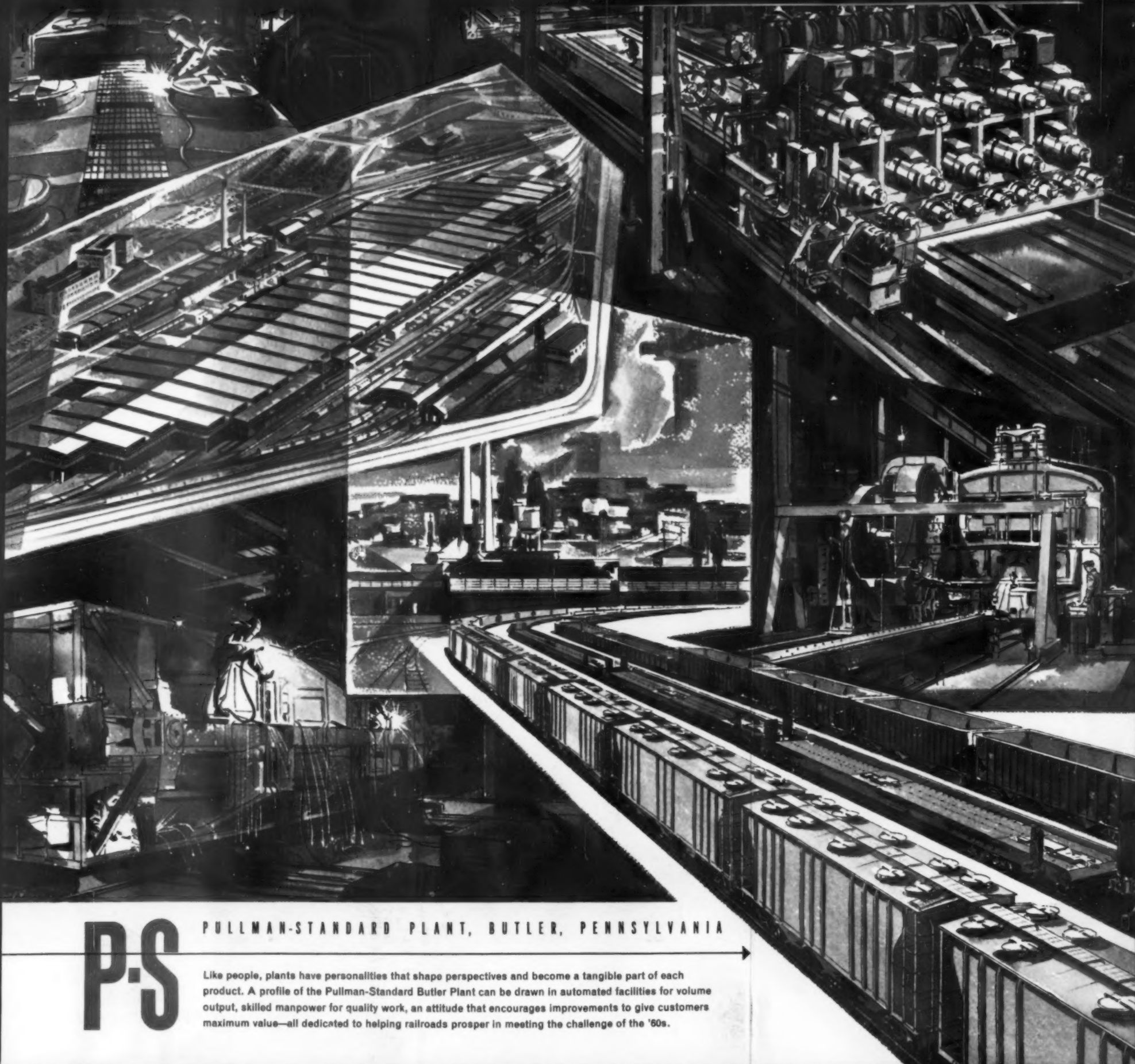
to his future activities, i.e., whether he planned to speak out as a brotherhood officer when his position conflicted with that of the organization.

Mr. Laney first got attention as a right-to-work supporter, more recently tried to negotiate a local agreement to insure lifetime jobs for the engineers and firemen in his division (RA, April 11, p. 9). He took the position that the battle to retain the firemen (in freight and yard service) has been lost and

"we elected not to stick our heads in the sand. . . ."

But the BLE took the position that Engineer Laney (a) as a local chairman has no power to negotiate such an agreement; and (b) as a brotherhood officer must follow closely policies adopted by BLE delegates.

A BLE spokesman said Mr. Laney retains "all rights and privileges of membership except that of holding office."



P-S

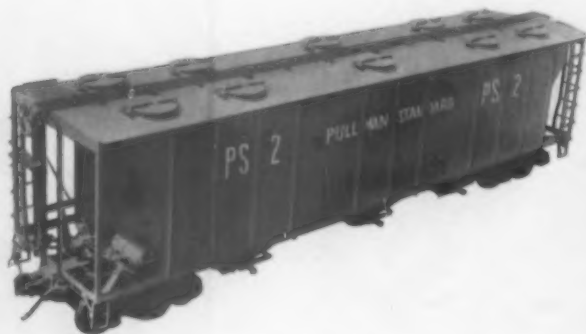
PULLMAN-STANDARD PLANT, BUTLER, PENNSYLVANIA

Like people, plants have personalities that shape perspectives and become a tangible part of each product. A profile of the Pullman-Standard Butler Plant can be drawn in automated facilities for volume output, skilled manpower for quality work, an attitude that encourages improvements to give customers maximum value—all dedicated to helping railroads prosper in meeting the challenge of the '80s.

P-S STANDARDIZED ROLLING STOCK

PRODUCTS OF MODERN MASS PRODUCTION FACILITIES

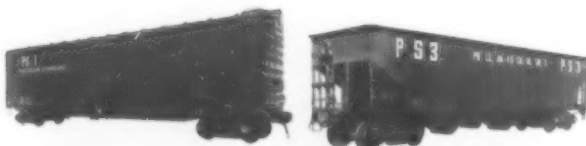
PS-2 COVERED HOPPER CAR—a product of the P-S Butler Plant. Modern building methods help keep the PS-2 ahead in design, performance and economy. This rugged, all-welded but economical car results from skilled application of the very latest production line equipment. Thoroughly standardized but constantly improved upon, the PS-2 is now available in four capacities, 2007, 2929, 3215 or 3506 cu. ft.



PS-4PB FLAT CAR—85 feet of piggy-back economy. This lightweight but strong Butler Plant product replaces dead weight with payload... already the standard of piggy-back fleets with over 2400 units sold in the first 18 months of production... another P-S standardization success story.



PS-5 GONDOLA—originally developed through long cooperation with major railroads, the rugged PS-5 is now rolling off Butler Plant lines. It combines quality with the mass-manufacturing savings possible through P-S standardization. Built with production line equipment, the PS-5 includes sufficient design versatility to meet variations in gondola use requirements.



PS-1 BOX CAR—standardization pioneer of the railroad industry. In thirteen years, 257 improvements have been added to the original PS-1 design. Options in car lengths, interiors, door types and sizes, and other accessories are available.

PS-3 OPEN HOPPER CAR—built to withstand all the hard service and abuse to which hopper cars are subjected. Standardized for original investment economies and built for long life and low maintenance service.



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All Pullman-Standard plants, like this one at Butler, Pennsylvania, are equipped with modern production methods, skilled manpower and extensive facilities to mass produce the very finest in standardized railroad rolling stock.

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AT BUTLER, A 385-FT. WELDING JIG—longer than a football field—helps give big PS-4PB a strong, unitized body construction. Twenty automatic submerged arc welding heads lay down ten welds simultaneously to make body components and underframe into one all-welded structure for a car of great strength but light weight.

AUTOMATIC FLOOR-PLATE WELDER AT BUTLER—butt welds ½" copper bearing steel plates into one even, smooth sheet to help provide PS-5s with uniformly strong, low maintenance steel floors. Another of the tools of P-S standardization designed to capitalize on the many inherent advantages of modern mass production methods. Another P-S way of producing cars of high quality, modern capability at lowest possible price.



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Hotbox Detector Cuts Setouts

Servo hotbox-detection equipment has helped the Clinchfield reduce setouts near Fort Blackmore, Va., by almost half.

Detectors in the installation inspect five southward-moving coal trains (450 cars) a day.

The detectors are some 64 miles south of the railroad's northern terminus at Elkhorn City, Ky., about halfway to the division point at Erwin, Tenn. (see map). Choosing the location for the detectors posed a problem: Servo Corporation engineers recommend that detectors be placed on tangent track at least 2,600 ft from a curve. Finding a piece of tangent that long in the desired area on this curving mountain railroad was not easy. The tangent section was located, however, although the inspected trains go around a curve soon after passing the detectors.

The entire 277-mile railroad has CTC signaling. Hence, it was desirable to have the hotbox recorder in the dispatcher's office at Erwin, Tenn., 71 miles from the detection equipment. More detector installations are planned for sites 50 miles south of Erwin and 30 miles north of Spartanburg, S.C.

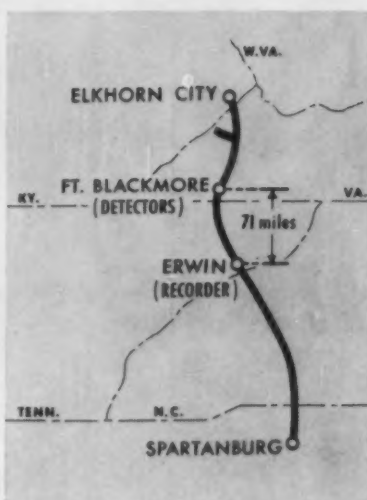
The carrier signals are superimposed on the message circuit. Two separate Harmon FM carrier channels were provided, one for the heat signal from each side of the train. The frequencies chosen were 40 kc and 55 kc.

Total cost of the detection system was \$20,674, of which \$717 represents the cost of the carrier equipment.

Warned by Light and Sound

To alert the chief dispatcher of the approach of a train to the detector, a buzzer is sounded and a red indication lamp is lighted approximately eight minutes before the train's arrival at the detector location. Connections to the CTC indication circuits are utilized to provide this warning. The buzzer may be silenced by operating a toggle switch. The red lamp remains on until the train clears the approach circuit in which the detection equipment is located.

The chief dispatcher scans a graph indicating the journal temperature and, if an abnormal temperature is noted, advises the dispatcher to stop the train. The train dispatcher places a controlled red signal (no special aspect) about five miles past the detector and turns on the maintainer call light. Clinch-



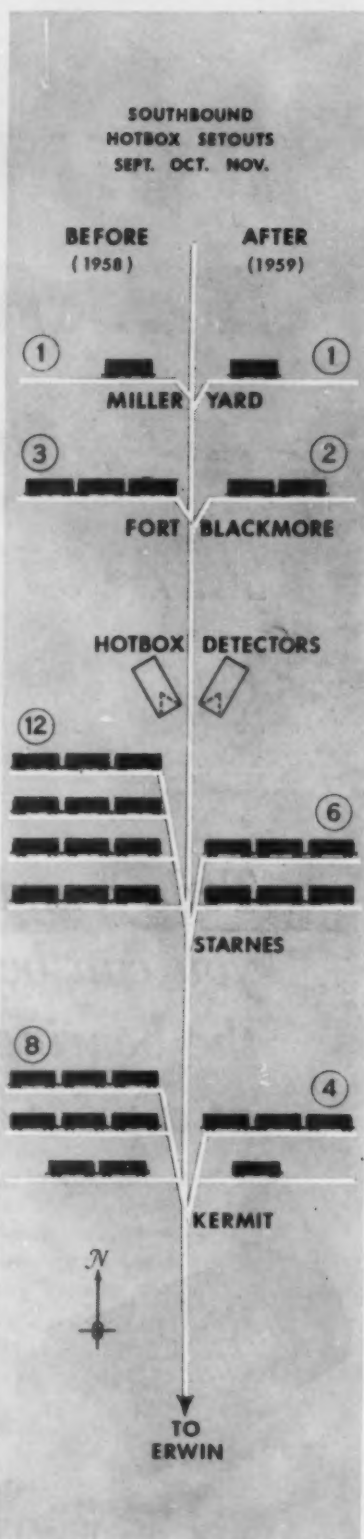
HOTBOX RECORDER is in the dispatcher's office at Erwin, Tenn., 71 miles from the detection equipment. More detector installations are planned for sites 50 miles south of Erwin and 30 miles north of Spartanburg, S.C.

EFFECT OF DETECTOR on the number of freight car setouts is shown in this diagram. Circled numbers indicate how many cars were set out at each location—during the indicated months—before and after installation of the detection equipment.

field operating rules require any person seeing a lighted maintainer call light to contact the train dispatcher. When a member of the crew calls in, he is told the location of the hot journal.

"The train crew at present decides if the car can be moved or must be set out," says W. E. Prince, Jr., engineer of signals and communications. "We have not set a fixed deflection point beyond which cars will always be set out, but every deflection of more than 10 to 12 mm above the normal is reason to stop the train for inspection."

The Clinchfield is planning installation of detectors at two more points. The first will be approximately 50 miles south of Erwin to check southbound trains, the second about 30 miles north of Spartanburg, S.C., to check northbound trains from connections at the southern terminus. The first recorder will be in the Erwin Yard office and the second at Bostic Yard, N.C.



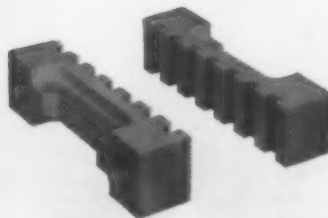
RAILROAD BEARINGS are MAGNUS' BUSINESS



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YES, Magnus is in the railroad bearing business —has been almost from the days of the Tom Thumb! And during this century of specialized service, Magnus has pioneered many significant advances in bearing metallurgy and design—to provide better bearing performance at lowest possible cost.

For example, the recently-introduced Magnus R-S Journal Stops have given railroads the first truly low-cost solution to the hot-box problem. By taking the "slop" out of the journal box, R-S Journal Stops prevent excessive displacement or lifting of the bearing—even under the most severe braking and switching impacts. They increase bearing life 200 per cent, reduce wheel flange wear, protect dust guards—cut operating costs all along the line. Magnus lubricators provide another important

link in the chain of improved bearing performance. And in diesel-electric and electric locomotives and MU cars, modern Magnus traction motor support and armature bearings assure trouble-free mileage between motor overhauls.

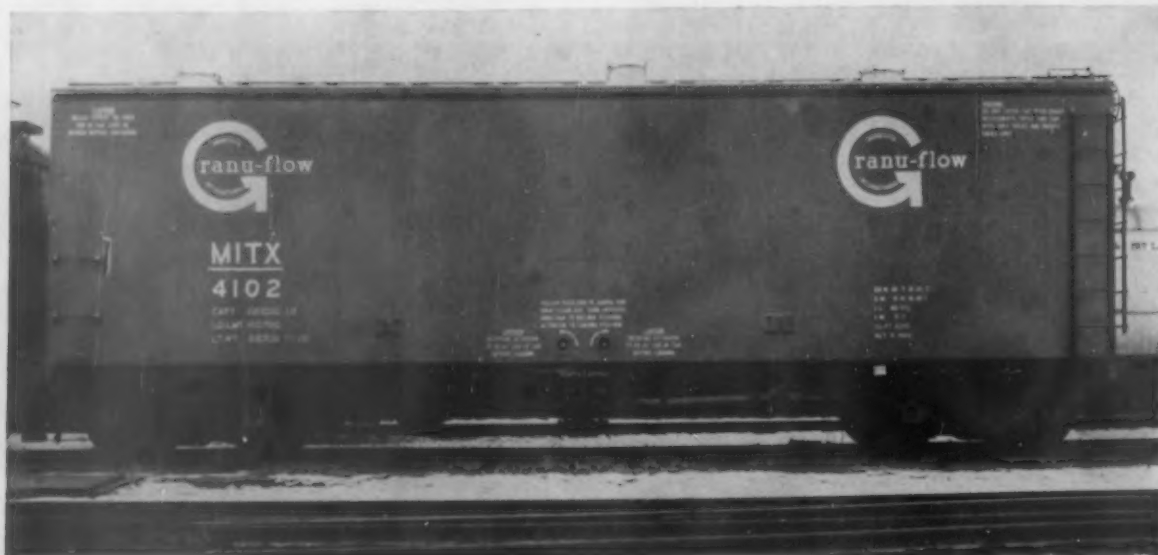
And Magnus is keeping a weather eye on the future, too. With this background of railroad experience, Magnus is continually developing and testing new designs of journal box components for still greater efficiency and economy in railroad service. Whatever the future may hold, of this you can be sure. Tomorrow's rolling stock will ride on Magnus bearings—bearings that are *right for railroads* in performance and in cost. For further information on Magnus bearing products, write to Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.

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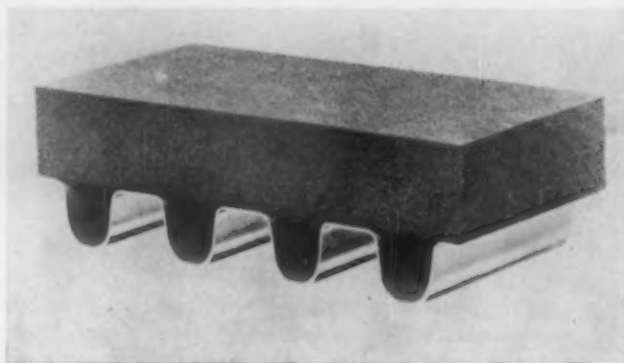




PROTOTYPE CAR incorporating new method for transporting bulk loads of fine granular material was outfitted

at GN's St. Cloud shops. Finished early this year, it has been under test ever since.

GN Tests New Technique for Bulk Lading



URETHANE FOAM FLOOR cross-section shows plastic corrugated vanes bonded to the underside.

Fluidization is the key to unloading the Granu-flow car.

Air introduced through a urethane foam floor puts in suspension or fluidizes any bulk load of fine granular material, such as flour, sugar, starch or chemicals. In this state the lading assumes the flow characteristics of a liquid. With only a six-degree floor slope from the ends to the center the car unloads by gravity.

The prototype car was built early this year by the Great Northern in its St. Cloud, Minn., car shops for the Minnesota International Transportation Corporation, Minneapolis, and Interail Holdings, Hopkins, Minn. Since then, it has been under test.

Here's how fluidization takes place:

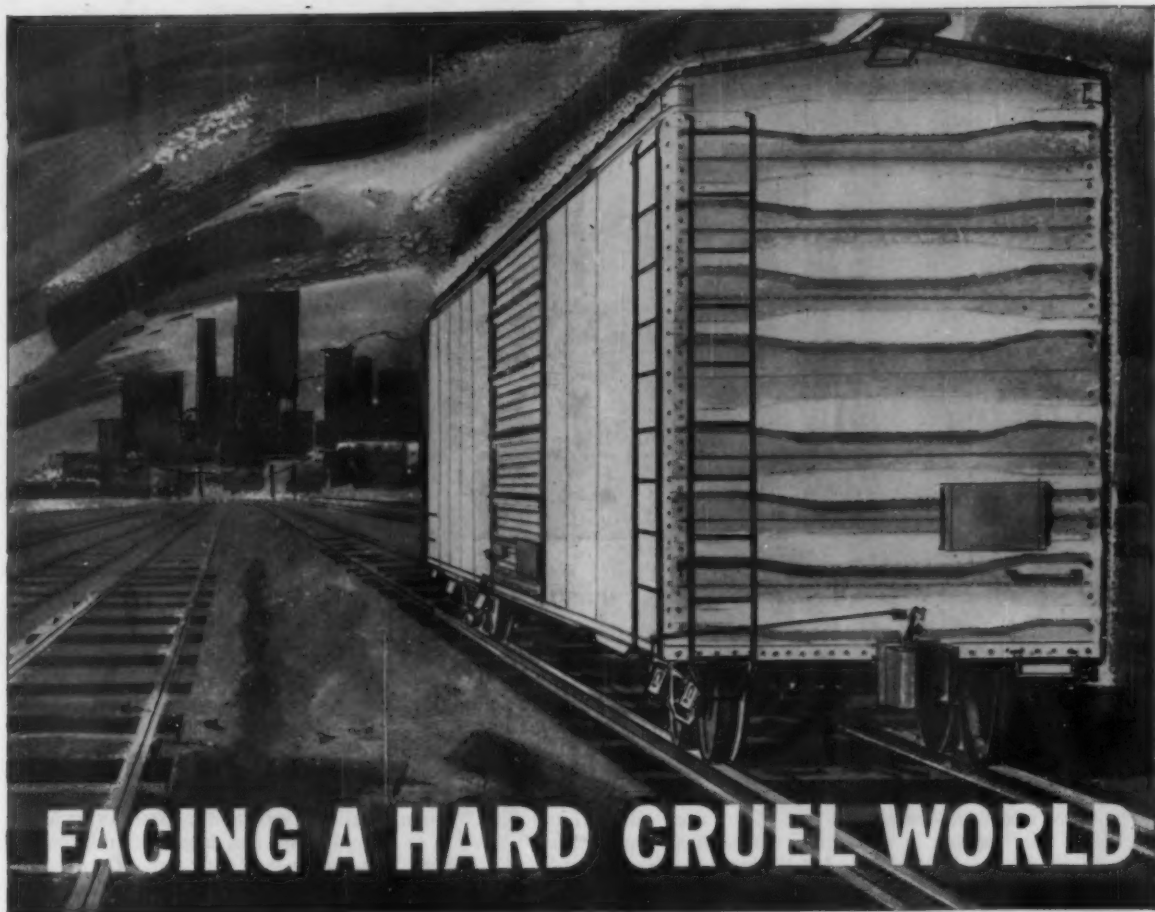
At the unloading point, an air supply from a centrifugal blower is connected

to a centrally located inlet pipe under the car. The air flows through corrugated vanes in a sheet of acrylic-nitrile plastic bonded to the underside of the fluidizing sheet. The sheet, applied over a 1-in. plywood floor, is made of non-toxic, odorless and abrasion-resistant urethane foam. Air from the blower produces a surface pressure of 1.25 psi under the foam. The foam cells act as one-way valves that permit the air to pass through the floor and into the lading, fluidizing it. When unloading is completed and air flow shut off, the foam cells close and prevent any granular material from impregnating the foam floor.

For final cleanout, a residual activator or scoop at each end of the car is operated by an exterior hand crank through sealed bearings. These devices

are moved by sprocket and chain from end of car to discharge ports, removing the remainder of the lading. Activators must be positioned at the car ends before loading.

Standard exterior box car construction is the basic shell for the 40-ft Granu-flow car with 3,200 cu ft capacity. The interior steel sides and ends are lined with 4-in. fiber glass insulation, the roof 3-in., all covered with a paneled ½-in. plywood lining sealed with Archer-Daniels-Midland Freight-Liner. A full 4¼-in. center bulkhead divides the car for split loadings. Permanent ladders at each side of the bulkhead give access to the hatches. Below the bulkhead are two discharge ports, positioned for existing discharge equipment, with individual gates for unloading either side.



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The Mark 40 is a higher capacity friction draft gear offered for standard pockets.

The *hard knocks* this car and its loadings will face can be minimized through the tremendous shock-softening capacity of the MARK 40 Friction Draft Gear. Here is that most needed high capacity with *high absorption*, yet *low reaction* or sill pressure. The MARK 40 WILL CUT DAMAGE CLAIMS, *reduce* car maintenance, and lengthen the life of the car! Fits standard 24 $\frac{3}{8}$ -inch pockets . . . has 3 $\frac{1}{4}$ inches of travel.

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New Products Report



Flexible Steam Hose

The White Line steam hose has been designed to combat the ravages of live steam transmission with modern materials. The hose incorporates an extruded Teflon inner core, pure bronze wire reinforcing braid, and swaged fittings with resistance to deterioration, abrasion, scaling, blow-offs, and leakage. It is available as assembled lengths, or as specialized hose lengths, in sizes from $\frac{1}{4}$ to 1 in. *Titeflex Inc., Dept. RA, Hendee St., Springfield 4, Mass.*



Insulating Covering

Insutube is a slip-on lightweight, non-combustible flexible tubing designed for temperatures ranging from 50 to 500 deg F. It is used for insulating bent piping or tubing where the use of rigid material is impractical. Tubes range in size from $\frac{1}{4}$ in. up to 1 in., in increments of $\frac{1}{8}$ in., also in $1\frac{1}{2}$ in. and 2-in. sizes, all $\frac{1}{2}$ in. thick. *Union Asbestos & Rubber Co. Fibrous Products Div., Dept. RA, 1111 W. Perry St., Bloomington, Ill.*



New Rail Anchor

A new one-piece rail anchor is available which has a U-shape cross-section. Known as "Channeloc," the anchor is claimed to have high gripping strength due to its double-flange support from end to end. Other features claimed for Channeloc include 100% tie bearing, smooth contours, wide striking surface for hand or machine application and large, flat rail-contacting surfaces. *True Temper Corporation, Dept. RA, Cleveland, Ohio.*



Compatible Printer

A 600-line-a-minute printer is now compatible with Univac tape-fed computer systems and those of other manufacture. The computer is not tied up while the printing is done. The printer automatically reads, checks and prints out information from magnetic tape. It prints an entire line at once, which may contain up to 130 characters, alphabetical and/or numerical. *Remington Rand Univac, Dept. RA, 315 Park Ave., New York 10, N.Y.*



Transistorized Computer

The RPC-9000 is a transistorized computer that accepts data in random order, and all affected records are automatically updated in a single uninterrupted sequence of operations. The basic system consists of a central processing and control unit which operates in microseconds, performs the calculations, controls the program, and searches the external memory tape; a continuous magnetic tape file for data storage; an input-output tape typewriter system that

reads paper tape at 60 characters per second, and punches tape at 30 characters per second.

Optional units include a 400 cards-per-minute photoelectric reader for input of data contained in 80-column punched cards; a 300-characters-per-second tape perforating unit; and a 666 or 1,000 lines (of 120 alpha-numeric characters each) per minute printer. *Royal McBee Data Processing Division, Dept. RA, Port Chester, N.Y.*

Seaway Chief Predicts 'Gradual' Cargo Increase

Lewis G. Castle, administrator of the St. Lawrence Seaway and Development Corp., expects "a gradual increase in cargo flow and dollar income" to make the Seaway self-supporting.

This prediction, he told a Syracuse University audience last week, is warranted by analysis of operations in 1959, when 6,595 vessels carried 20,000,000 tons of cargo through Seaway facilities. He noted that toll income permitted payment of \$2,000,000 to the U. S. Treasury Department on the Seaway debt.

Mr. Castle described Seaway critics as "doubting Thomases viewing with alarm."

Replying to those who say the Seaway will mean an influx of foreign-made goods into the U. S., Mr. Castle said that during 1959 the Seaway handled 2,450,000 tons of export cargo (excluding goods going to Canada) and 1,135,000 tons of import cargo. Thus, he said, Seaway traffic maintains a "favorable balance."

He also took note of criticism that the Seaway locks would be an easy enemy target in wartime. He conceded that this was true, but said "all seaboard ports, ore mines, electric utilities, grain elevators, railways and battleships would likewise be war targets." On the other hand, he said, the Seaway in time of war would provide a shorter route to Europe from the submarine-free Great Lakes.

Mr. Castle concluded: "Progress and reality cannot be disregarded. One cannot hide his head in the sand and ignore the certainty of stimulated and imaginative forward progress in our country's economy. With the continued dredging of Great Lakes channels and harbors, with the spreading of information about the economies and the conveniences of the Seaway, and with the added stimulation of traffic by Great Lakes ports and ship lines, we shall amply justify this new avenue of commerce."

Another speaker at the 12th annual Syracuse Transportation Conference—Dr. Burton N. Behling, AAR economist—heartily agreed that the Seaway should be self-supporting. But he was less optimistic than Mr. Castle.

Dr. Behling maintained that last year's financial results "tend strongly to confirm the position that the tolls were fixed too low." He added:

"Unless the Great Lakes-St. Lawrence Seaway in all its parts is a fully self-supporting transportation facility, with no element of subsidy to the users, it cannot possibly contribute to the true economy of the whole transportation complex of the United States."

HOW TO READ A PRICE TAG

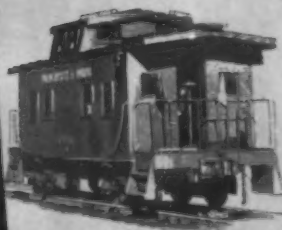
(When you're buying a battery for railroad service)

COST CONSCIOUS BUYERS KNOW that the figure on a price tag tells only *half a story*.

The *true cost* is revealed when price is related to what the buyer gets.

THE FIGURE ON THE EDISON price tag is higher. But when you consider *value* in terms of longer life, trouble-free performance, durability and dependability, your EDISON battery *costs less*. And yet it protects your investment by assuring top performance.

Send for EDISON's informative "Extra Dividends" booklet and get the complete "price-cost" story. Write Storage Battery Division, Thomas A. Edison Industries, West Orange, New Jersey. In Canada: CLM Industries, Division of McGraw-Edison (Canada) Ltd., Toronto 13, Canada.



EDISON The Higher-Priced
Battery that Costs Less
For car lighting . . . air conditioning . . . industrial trucks
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**EDISON NICKEL-ALKALINE
STORAGE BATTERIES**

Another
Product of

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Top Lock Lifter
Assembly . . . Cat. No. E-6-A



Top Lock Lifter
Hole Cap
Cat. No. E-2



Top Lock Lifter
Hole Cap
Cat. No. E-2-A



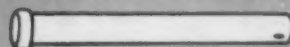
Knuckle Thrower...Cat. No. E-30



Articulated Rotary
Locklift assembly
Single . . . Cat. No. E-24-B
Double . . . Cat. No. E-25-B



Knuckle . . . Cat. No. E-50



Knuckle Pivot . . . Cat. No. C-10

Lock
Cat. No. E-40



AAR Standard Type E Coupler Parts

New Youth for



Knuckle . . . Cat. No. F-5T



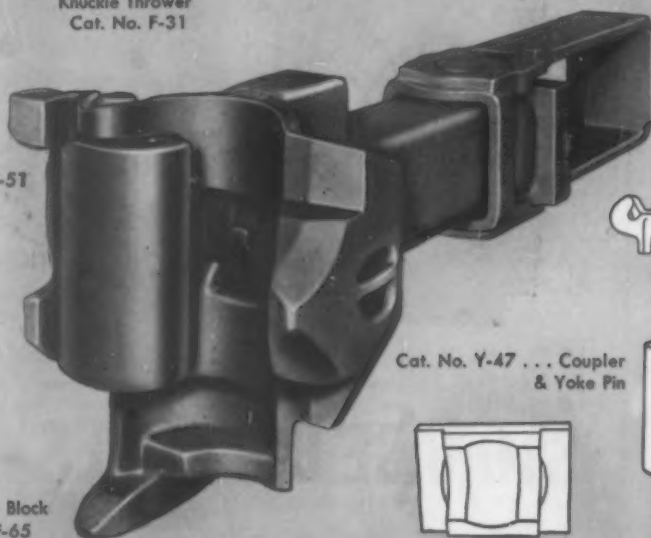
Knuckle Thrower
Cat. No. F-31



Knuckle Pivot . . . Cat. No. C-10



Rotor, Single
Cat. No. F-8



Cat. No. Y-47 . . . Coupler
& Yoke Pin

AAR Standard Type F Coupler Parts



Lock . . . Cat. No. F-41



Pin Bearing Block
Cat. No. F-65
and Spring
No. F-66



Rotary Lock
Lift Assembly
Cat. No. F-7
AND
Rotor F-8
Assembled.



Rotary Lock
Lift Assembly
Cat. No. F-7



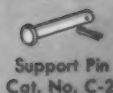
Cat. No. Y-46 . . . Follower



Cat. No. Y-45 . . . Yoke



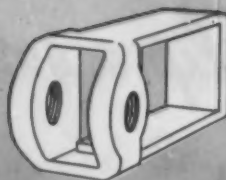
Knuckle
Cat. No. H-50-B



Support Pin
Cat. No. C-2



Lock
Cat. No. H-40-A



Cat. No. Y-50 . . . Yoke



Knuckle Thrower
Cat. No. H-30-A



Knuckle
Pivot Pin
Cat. No. C-10



Rotary Lock Assembly,
Double . . . Cat. No. H-16-A



Rotary Lock Assembly,
Single . . . Cat. No. H-15-A

TIGHTLOCK Type H Coupler Parts

Aging Couplers

with the toughest repair parts made!

When couplers need rebuilding or repairs, remember . . . Only ASF makes ALL types of AAR approved coupler designs. Whatever your requirements, therefore, you can be sure they will be promptly and completely satisfied. What's more, ASF parts are not only the toughest, most durable made but they are guaranteed to be original replacement parts, precise in every mi-

nute detail of shape and dimension.

So, when you rebuild with ASF parts, the finished product is, for all practical purposes, a brand new coupler. To serve you promptly, too, we maintain a large inventory of coupler parts ready for immediate shipment. So, any time you need coupler-parts, call in your ASF representative. Get the toughest repair parts made!

ASF PARTS FULLY SATISFY AAR TEST SPECIFICATIONS



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Canadian Manufacturer and Licensee: International Equipment Co., Ltd., Montreal 1, Quebec
Other Foreign Sales: American Steel Foundries, International, S.A., Chicago



Flip a switch...use 64/12 volt



MOTOROLA

MOTOROLA MOTRAC RADIO

in ENGINE...CABOOSE...BASE STATION

- NO NEED TO CHANGE POWER SUPPLY, one radio serves both 64 and 12-volt DC applications.
- No radio modification required for base station use—AC-to-DC Adapter available for operation from 117-volt, 60 cycle current.

Mounts in standard AAR
single unit rack.



Now, new flexibility . . . new time and money savings can be yours when you standardize on one basic radio to serve all of your operational needs. The Motorola MOTRAC Universal Railroad Radio can be used in the engine from 64-volt DC power . . . in the caboose from the 12-volt DC power . . . and in base station applications from 117-volt AC power with adapter.

HERE ARE THE FACTS:

MOTRAC radio eliminates the common maintenance problems. No tubes in the receiver and no vibrators in the power supply.

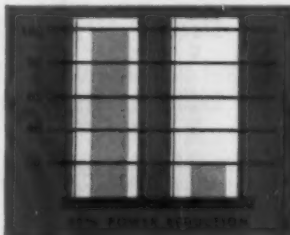
- Voltage changeover switch is readily accessible to authorized railroad personnel—voltage may be switched from outside of housings, yet is protected from inadvertent switching.
- All components are in one "package" with common metering sockets readily accessible—operation can be tested quickly with present Motorola test equipment.
- Polarity protection assures against damage to radio if primary voltage of wrong polarity is applied.
- Completely enclosed housing provides maximum protection from dust, dirt and water.

In Motorola MOTRAC Universal Railroad Radio, every attribute of the transistor—reliability, light weight, compactness, reduced maintenance and operating costs—are initially and fully realized.

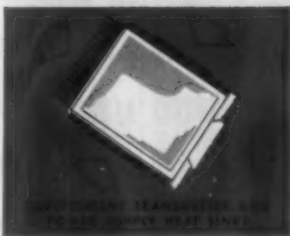
THE RESULT: **Reliability** never before achieved in railroad communications.

All the facts are as close as your nearest Motorola Railroad Communications Representative. Call him today.

POWER SUPPLY—The first to provide dual voltage with proven transistor reliability. This dynamic new concept in a railroad transistorized power supply is accomplished through the use of series transistor switching circuits. The series circuit design allows greater safety margin since only low voltages are applied to power transistors—heat producing voltage dropping resistors are eliminated. **VOLTAGE REGULATION** feature assures constant operating voltages—longer transmitter tube life . . . stable receiver performance. **OVERLOAD PROTECTION** automatically removes radio from the primary power in the event that overloads or short circuits occur.



RECEIVER—With transistors, power consumption is cut 80% and operating temperatures are reduced up to 40°F. Rugged die-cast chassis and the use of dependable printed circuitry are among the industry's most advanced design features.



TRANSMITTER—Proven Motorola design uses only five tubes—with only three different tube types. This means valuable time and money savings—minimum tube replacement problems. External heat sinks assure maximum component service and efficiency.

MOTRAC UNIVERSAL RAILROAD RADIO

Motorola Communications & Electronics, Inc., 4501 Augusta Blvd., Chicago 51, Illinois. A Subsidiary of Motorola Inc.

MOTRAC is a trademark of Motorola Inc.

REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted.)

MONTH OF JANUARY OF CALENDAR YEAR 1960

[illegible]

(Continued on page 36)

April 18, 1960 RAILWAY AGE



R-570

This one-coat finish is a tough, long-lasting work-horse that saves you money!

For a tough, flexible one-coat job that really lasts — Rust-Oleum 570 is the practical, economical answer! It's a real work-horse — goes on easily by brush or spray (including hot spray, airless spray, and conventional spray) — dries quickly for same-day stencilling to a tough, firm, high-gloss finish that resists fumes, moisture, heat, and weathering.

For this and other Rust-Oleum one-coat finishes in a wide variety of colors, consult your Rust-Oleum Railroad Specialist or write the Rust-Oleum Corporation. If you use a special color or a particular shade, we'll be happy to match it. Try a drum . . . the sooner you do, the sooner you'll see what a Rust-Oleum one-coat finish can do for you. It's a matter of excellence.

RUST-OLEUM CORPORATION, 2679 Oakton Street — Evanston, Illinois

RUST-OLEUM®

STOPS RUST!



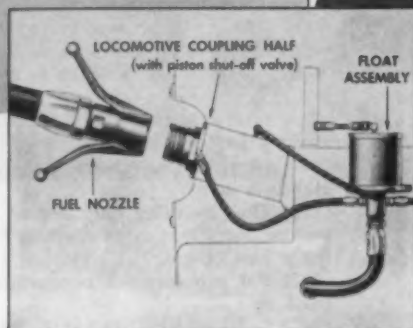
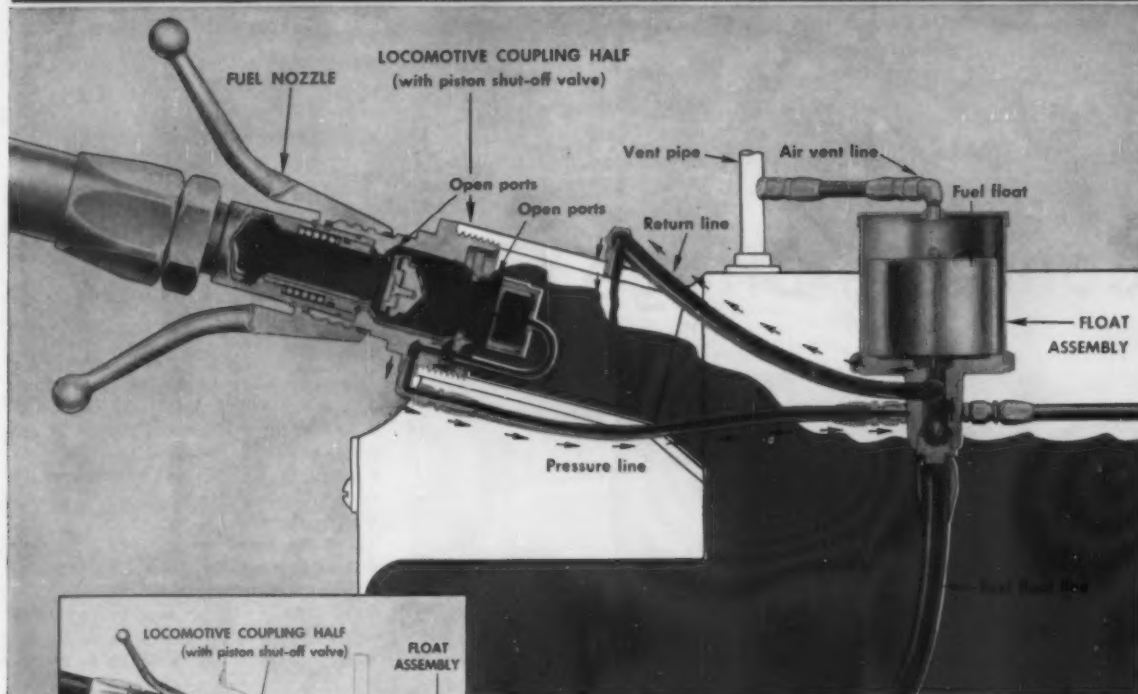
There is only one Rust-Oleum.
Distinctive as your own fingerprint.



Rust-Oleum is available in
practically all colors, including
aluminum and white.

Eliminate Fuel Waste! Cut Fuel Costs 1% to 2%! Do Away with Costly Separators!

WITH THE AEROQUIP AUTOMATIC FUELING UNIT



Aeroquip Automatic Fueling Unit consists of these three basic parts: self-sealing fueling nozzle, locomotive coupling half with piston shut-off valve, and float assembly.



Dependability and versatility of the Aeroquip Automatic Fueling Unit has been proved by two years' road service.

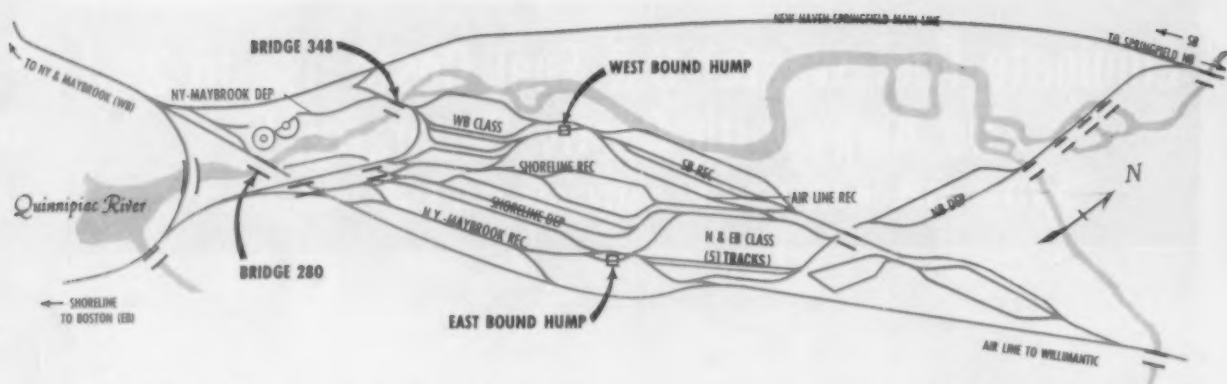
Cutaway view of the Aeroquip Automatic Fueling Unit shows principle of operation. Fuel pressure has opened the shut-off valve piston in the locomotive coupling half. The piston remains open for full fuel flow as long as the pilot flow continues through pressure and return lines. When float at right reaches cut-off level, this pilot flow stops and piston closes shut-off valve.

The rugged Aeroquip Automatic Fueling Unit saves its entire initial cost in 6 to 18 months, depending on local conditions. It is designed to provide fully automatic refueling for all diesel locomotives. Road tested for two years, it has proved completely safe and dependable. Performance features include high flow rate to 300 g.p.m., full-tank refueling without hand topping, elimination of overflow and spillage. The Unit is a complete, low-cost package that is compatible with existing fueling systems, installs in 1 to 3 hours and requires minimum maintenance. For complete details, call your Aeroquip Sales Representative or write for new Bulletin 624.



Aeroquip

AEROQUIP CORPORATION, JACKSON, MICHIGAN
INDUSTRIAL DIVISION, VAN WERT, OHIO • WESTERN DIVISION, BURBANK, CALIFORNIA
AEROQUIP (CANADA) LTD., TORONTO 19, ONTARIO
AEROQUIP PRODUCTS ARE FULLY PROTECTED BY PATENTS IN U.S.A. AND ABROAD



KEY POSITION of Bridge 348 is shown in this diagram.

Concrete Bridge Goes Up Fast



CONCRETE PILES AND BEAMS support new New Haven Bridge 348 at Cedar Hill yard. Bridge was completed seven weeks after first pile was driven.



LINKING WB DEPARTURE YARD to WB classification yard, 288-ft. bridge plus 112-ft gravel fill replace a 400-ft timber trestle destroyed by fire last summer.

► **The Story at a Glance:** If your main classification yard is tucked into the curve of a river and linked to the main line with bridges, loss of even a small bridge can raise major management questions:

- Are there acceptable detour routes within the yard?
- Can operations continue with reduced yard capacity?
- Is it less costly to accept some train delays or to build a new bridge?
- If a new bridge is to be built under bad weather and tide conditions, what is the most economical method of construction?

Faced with these questions, the New Haven found:

- (1) That by using only one of two humps, operations could continue without a new bridge.
- (2) But, expenses and inconveniences piled up.
- (3) So a decision was made to install a pre-stressed, pre-cast concrete span, and on March 28, Bridge 348 was re-opened for service.

The New Haven's Cedar Hill Yard (New Haven, Conn.) sits in the bends of the Quinnipiac River, a meandering tidal stream (see map). When, in August 1959, fire destroyed Bridge 348 linking westbound classification and departure yards, NH had a problem.

Cedar Hill is the cornerstone of New Haven freight operations. It is the only hump yard on the system. Equally important, it is at the crossroads of major east-west and north-south routes. Save for some flat switching at Providence, R.I., and Maybrook, N.Y., virtually all cars that enter or leave the New Haven are classified in this central yard.

(Continued on page 45)



Teletype machines help cut costly paperwork

A Teletype machine equipped with a simple sprocket-feed mechanism can handle multi-carbon forms as readily as the more familiar plain paper on which messages are transmitted. Thus distances can be bridged not only with information, but with information that is preprocessed, ready to go to work.

Teletype printers handle a wide variety of multi-copy forms. Moreover, the usefulness of this technique can be further extended with Teletype tape punching and reading equipment—which can capture, store and utilize repetitive data to further mechanize paperwork procedures.

For more information about Teletype Model 28 equipment, please write to Teletype Corporation, Dept. 45D, 4100 Fullerton Ave., Chicago 39, Illinois.



Typing Tape Punch



Tape Reader



Send-Receive Page Printer



Automatic Send-Receive Set

TELETYPE®
CORPORATION
SUBSIDIARY OF Western Electric Company INC.

Autos Go Flexi-Van, Detroit-to-N.Y.

With the arrival of 12 specially designed Flexi-Van automobile carriers in New York last week, Chrysler Corporation became the first manufacturer to piggyback automobiles from Detroit to the New York City area. The shipment of 44 Valiants and four Dodges left Detroit via New York Central on April 12. Arriving at New York Central's Bronx Flexi-Van terminal at High Bridge on the morning of April 14, the new cars were in the hands of dealers that afternoon.

Chrysler's director of traffic, Paul G.

Fritzching, Jr., said of the movement, "This is the first of a series of test shipments by Flexi-Van. If these movements prove successful over a period of several weeks, we will consider further applications to New York and other areas."

Noting that Flexi-Van was completing its second year of operation, New York Central Vice President, Freight Sales & Service, A. E. Baylis commented: "This first automobile shipment is an important step forward for Flexi-Van, a major breakthrough both for the

Central and for our automobile producing customers . . . The service has shown a steady growth since its introduction two years ago."

Mr. Baylis added that in 1959, NYC carried 23,363 Flexi-Van loads, nearly five times the 4,873 carried in 1958. And, he said, results for the first two months of 1960 show a continuing growth. Interchange agreements with five other roads are now in effect, Mr. Baylis said, with a sixth road, the Louisville & Nashville, scheduled to join Flexi-Van ranks soon.

Railroading



After Hours with

Jim Lyne

WHAT'S A CITY FOR?—There's a lot of appropriate worrying going on, about the actual or potential decay of big cities at their very center—with shopping areas and companies with a lot of employees moving to the suburbs.

The reason, of course, is profligate construction of highways around the cities—tending to reduce traffic and earnings of commuter and transit lines, causing them to shrink their service, thereby diverting more traffic to the highways and creating more congestion. To save the city centers, suburban and urban transit must be improved and extended—and commuting by auto minimized.

Why save the big city centers? The reason is that you can see more people you need to see in a day, in a place like Chicago's loop, than you could see in a week if each of them were stuck out in the suburbs 30 miles apart.

GAS TAX FOR TRANSIT—I see where an aspirant for the Democratic nomination as governor of Illinois has come out for using a part of the gasoline tax for "urban and suburban mass transportation . . . to relieve the unbearable and unending pressure on streets and highways."

Why not? When I pay gasoline taxes what I'm paying for is highway space. If part of what I pay is used to make transit service more attractive—then maybe there'll be more highway space for me that way than if all the gas tax is whooped off on building more highways.

BUT IS IT PROGRESS?—I see that the GM&O has been forced to pull off the last remaining passenger train on its line across Missouri into Kansas City. As recently as the time of World War II there were four passenger trains in each direction on this line—and away back in 1910 there were seven in each direction.

This line (then the Alton), prior to World War I, was justly famous in its territory for the quality of its passenger service—in particular for the way it kept its equipment spic and span, for the courtesy of its employees, and for its insistence that firemen "fire white smoke."

There are some good sized towns on this line that

now have no common carrier passenger service at all. You go there by private auto or taxi, or you don't go. Our country is hothousing private transportation and discouraging common carriers. Even if this is progress, I'm still against it.

KNOWING THE PROFS—We had a piece here (March 7, p. 42) about railroad relations with universities—suggesting that not all railroads are as close to their local educational institutions as they might be, to their mutual advantage.

Well, now, Professor William K. Schusler of Duquesne University in Pittsburgh tells me I can quit worrying—at least as far as the Pittsburgh railroads and his University are concerned. Relations of Duquesne with local railroads are those of "complete cooperation." Railroads provide guest lecturers, arrange for tours of railroad facilities, and help scholars who are doing research in transportation.

I knew, of course, that this happy situation exists in some places—but not everywhere.

CONTRACT OR VOLUME RATES?—A shipper asked a railroad friend of mine: "Why do you want contract rates or 'agreed charges' when the ICC already lets you make volume rates? What's the difference?"

"The difference," my friend says, "is the difference between hope and assurance. We make volume rates and we hope you will use them. I personally would rather have a contract with you."

FLIER PREFERS TRAINS—One of my colleagues tells me of a test pilot for one of the big aviation supply companies, who will not fly on commercial airlines because they won't let him wear a parachute. He insists on going by train. The company authorizes travel by air only. So this pilot has to cut into his vacation time and pay any difference in rates out of his own pocket, in order to feel safe when he travels.

I have heard of this before—people in the airplane business who won't fly, like the barkeep who never touches the stuff.

FOR CARLIGHTING—
the same power in less space
SAVES WEIGHT



FOR DIESEL LOCOMOTIVES—
longer battery life means
GREATER ECONOMY



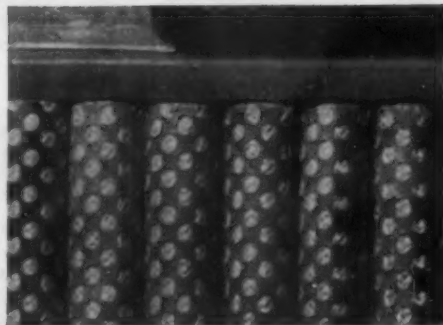
EXIDE-IRONCLAD BATTERIES MEAN MONEY SAVED

In Carlighting. You can save up to 616 lb. deadweight per car and still get the power you need with an EG Exide-Ironclad Battery. Use your fuel to pull passengers, not excess weight.

In Diesel Locomotives. New MGD Exide-Ironclad positive plate construction retains active material better—prolongs battery life. Design unlocks more power for greater economy. Batteries now need less space, give new versatility for application in different size locomotives. One size battery will fit all locomotives.

Find out how much you can save with an Exide-Ironclad Battery! Write to Exide Industrial Division, The Electric Storage Battery Company, Philadelphia 20, Pa.

Exide®



Here's the Secret. The new improved Exide-Ironclad tubular positive plate. Unlocks even more power per ounce of active material than in the past. Gives you more capacity per cubic inch of space and longer battery life for greater economy.



*"And, at the recommendation of our two most traveled passengers,
I hereby move that Chipman Weed Killers be used on our railroad."*

A broad line of Chipman weed, grass and brush killers is available. Each is formulated to solve specific vegetation control problems. Most widely used are these trade-name products:

Attacide • Atlas "A" • Chlorax • Chlorea • Methoxone-Chlorax
TCA-Chlorax • Methoxone-Chlorea • Chipman Brush Killer

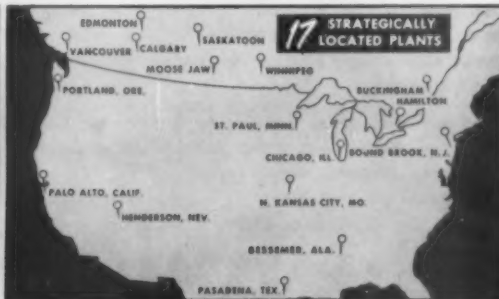
These chemicals, as well as our special application service and equipment, are backed by almost a half century of extensive railroad weed control experience.

Let us solve *your* weed problem with the *right* chemicals and application service. Your inquiry will receive prompt attention.

CHIPMAN Chemical Company, Inc.

BOUND BOOK, NEW JERSEY

World Leader in Chemical Weed Control Since 1912



New TOFC Breakthroughs Seen

Piggybacking, the continuing source of new ideas in transportation, may be on the threshold of new breakthroughs.

Morris Forgash, president of United States Freight Co., spelled out some of them in a speech to the Traffic Club of New York on April 7.

As Mr. Forgash sees it, piggybacking in 1960 will move railroads toward faster freight schedules, more combined freight-passenger service and increased study of equipment standardization.

Moreover, according to Mr. Forgash, the "inevitable" development of an all-purpose container for piggyback service will solve the toughest economic problem in transportation—empty car and truck mileage.

On faster freight, combined service and equipment standards, Mr. Forgash said:

- "I predict we will have 50-hour service, Chicago to the Pacific Coast, and 65-hour service to the coast from New York by the end of 1960." Progress in this direction is being made even faster than he had supposed, he said.

- "Reasonably priced rail piggyback

service, at speeds which are entirely feasible, can hold its own with the best that can be produced for long distance over the best superhighways or in the air, even in a jet age."

- "A combined freight-passenger service, already functioning in certain places, can reduce the overall passenger deficit . . . Passengers have never objected to riding in the same train with baggage and express. Why should they object to riding in the same train with freight moving in containers—especially if it insures a payload that will keep the passenger service going?"

- "Empty car mileage will never be entirely eliminated because some freight always will require specialized equipment that cannot be used in the return direction. But the enormous waste of carrier resources and shipper dollars can be reduced if we devise equipment that has the absolute maximum of utility."

Mr. Forgash went on to say he believes an all-purpose container could reduce empty car-miles by at least 50%.

He said, for example, that one refriger-

erator car line has decided to use trailers to compete for citrus traffic from Florida. If these trailers were piggybacked empty on the return haul the movement would not be feasible; but his own company is considering working with this car line to provide return loads.

Equipment suitable for such multiple uses is already past the "dream" stage, Mr. Forgash added.

"On the drawing board and just about to emerge is a trailer carrying the all-purpose concept even a step further," he said. "Insulated and refrigerated, this trailer will hold four large or six small automobiles. It will carry a collapsible rubber tank with 4,300 gallon liquid capacity. It will carry dry freight, perishables—or various combinations of all these items.

"Obstacles to the use of this all-purpose equipment ought to be brushed aside like cobwebs because the results in terms of elimination of waste, reduction in empty haulage, encouragement to coordination, flexibility of transportation and economy to the country outweigh all other considerations."

N&W, NKP Continue Merger Talks

Merger discussions between the Norfolk & Western and Nickel Plate should indicate "in the not too distant future whether an acceptable arrangement can be worked out." That's what N&W President Stuart T. Saunders reported at his road's 35th annual Better Service Conference.

The conference, held April 8 and 9 in Roanoke, Va., was attended by about 600 N&W employees and guests of the road. The employees were delegates representing Better Service Clubs throughout the N&W system.

Mr. Saunders said it was too early to determine what results of the N&W-NKP talks would be. At the same time, he reported that "good progress" had been made, and that the talks were "continuing on a very active basis."

Meanwhile, the N&W president expressed his general belief that "there are too many railroads," and that "appropriate combinations" of existing lines "offer one of the best assurances that the railroads will remain the backbone of the nation's transportation system." He thinks this applies particularly to "high density roads which are in a position to take full advantage of technological advances and operate with maximum efficiency."

By the same token, Mr. Saunders also thinks a "substantial mileage" can't be saved. He explains: "The prospects for cost reduction on lightly travelled lines are not particularly good, since effective utilization of much of our modern cost saving equipment depends upon reasonably high traffic levels."

As this indicates, Mr. Saunders does not think the merger route is the way out of difficulties for all railroads. Each case must stand alone, he says. That's also his answer to the question of whether roads should enter merger plans only from positions of strength—or whenever at least some gain is indicated.

The N&W president does not subscribe to recent reports saying railroad executives are "not impressed" by current merger talks. He finds the industry's leaders now giving more thought to mergers than they have for some time. And he thinks statements of the ICC and individual commissioners amount to strong encouragement for a merger movement.

If a proper public relations job is done, Mr. Saunders doesn't think merger plans would be thwarted by the opposition of railroad unions and com-

munities that might be affected. Both of these, and other affected interests, would be benefited in the long run, he explains.

Mr. Saunders calls the merger of the former Virginian into the N&W a "natural." He believes it set a precedent which will influence future policy of the ICC.

"The soundness of the arrangements," he says, "provided a pattern which won government approval in a remarkably short time, considering the lengthy hearings and litigation which are so often associated with many cases of this type.

"It was no accident that this merger moved forward rapidly from the first. A great deal of careful planning and hard work paved the way for its successful consummation."

Other speakers at the conference included three N&W vice-presidents—John P. Fishwick (law), Robert N. Woodall (traffic), and H. C. Wyatt (general manager). Mr. Wyatt made a progress report on physical changes involved in the N&W-Virginian merger. He mentioned more than 20 separate projects which are taking "thousands of man-hours and millions of dollars to weld us into one railroad."

MARKED FOR REPLACEMENT BUT IT COULD HAVE BEEN SAVED



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SERVING RAILROADS SINCE 1935

People in the News

AKRON, CANTON & YOUNGSTOWN.—Cal P. Fenton, general agent, Portland, Ore., appointed district traffic manager at St. Louis, Mo. Mr. Fenton succeeds to the territory previously covered by Albert J. Wissel, retired district traffic manager at Cincinnati, Ohio. Rudolph E. Schroeder succeeds Mr. Fenton.

CANADIAN NATIONAL.—Samuel Hibner, superintendent sleeping, dining and parlor car department, central region, Montreal, Que., transferred to the western region, Winnipeg, Man., succeeding Charles A. Wilson, retired.

ERIE.—Francis L. Collins, general agent, Newark, N. J., retires April 30.

FLORIDA EAST COAST.—J. Sims, master mechanic, Miami, Fla., appointed general master mechanic, Bowden Shops, South Jacksonville, Fla.

FRISCO.—L. A. Thomas appointed terminal trainmaster, Memphis, Tenn. B. C. Davidson named trainmaster-roadmaster, Springfield, Mo.

ILLINOIS CENTRAL.—L. R. Clayton, trainmaster, Tennessee division, Memphis, transferred to Freeport, Ill., to replace N. L. Meadows, Jr., assigned other duties. L. Hogan, Jr., trainmaster, Bluford, Ill., named to succeed Mr. Clayton, and in turn is replaced by R. L. Warren, transferred from Jackson, Miss. Mr. Warren's successor is J. P. Moran. M. E. Corzine appointed trainmaster, Tennessee division, Memphis, to replace B. M. Foreman, assigned other duties.

H. L. Williams appointed assistant to general superintendent transportation—special assignment, Chicago.

LACKAWANNA.—R. S. Bird, assistant controller, New York, retired April 1.

MISSOURI-KANSAS-TEXAS.—Thomas D. Flanigan, sales manager, Salt Lake City, named to the newly created position of regional sales manager, San Francisco.

NORFOLK & WESTERN.—Lawrence T. Forbes, general agent, Beckley, W. Va., appointed district coal traffic manager there, a newly established office.

SANTA FE.—Titles of G. B. Dreisbach and R. C. Mock, supervisors of freight claim prevention, Topeka, Kan. and Amarillo, Tex., respectively, changed to supervisors of better freight handling.

SOO LINE.—Charles S. Pope, vice president personnel, public relations and safety, Minneapolis, Minn., retired April 1. Wallace W. Abbey, assistant to vice president—public relations, Minneapolis, Minn., appointed director of public relations. Mr. Abbey will be in charge of the company's public relations and advertising programs.

SOUTHERN PACIFIC.—J. N. Albertson appointed assistant general superintendent of communications—system, San Francisco.

Richard E. Wedekind, general attorney, San Francisco, retired.

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.—Arthur G. Harlan appointed signal supervisor, succeeding J. E. Tondick, retired.

WABASH.—Earl C. Perkins, assistant freight traffic manager, St. Louis, named traffic manager, Northeastern territory, with headquarters at Detroit, Mich.

WESTERN MARYLAND.—Robert H. Kirckhoff appointed freight service manager, Baltimore, Md.

Supply Trade

Bernard C. Yearley, assistant to vice president, National Malleable & Steel Castings Co. of Cleveland, has been appointed vice president of the newly formed General Research, Development and Engineering Division.

Louis W. Pingel, Jr., senior special representative, industry sales, eastern region, IBM Data Processing Division, has been appointed program administrator—transportation and communication, industry marketing at DPD headquarters in White Plains, N.Y.

Russell L. Bowersox has been named manager—advertising and sales promotion for the Equipment Section of General Electric Co.'s Locomotive & Car Equipment Department. Mr. Bowersox will continue his editorship of the company magazine, "Going Places."

Sanford H. Steward, Jr., has been named district sales manager, railroad products, central region of the United States, for Servo Corp. of America. Mr. Steward will cover Illinois, Iowa, Minnesota, Missouri and Nebraska.

Dean Morgan has been named Washington, D.C., marketing representative for Servo.

Robert E. Overby has joined Automatic Electric Sales Corp. as a staff engineer in the company's carrier and radio sales organization. Mr. Overby was formerly with Illinois Bell Telephone Co.

John S. Gallagher, Jr., former manager, passenger traffic research, New York Central, has established offices as a consultant in Philadelphia. Mr. Gallagher will specialize in suburban transit and intercity passenger service problems and in management operations and planning.

William E. Withall has been elected chairman of the board of directors of Enterprise Railway Equipment Co. Harry A. Withall has been elected president, and Harold Harris named vice president.

Union Switch & Signal—Division of Westinghouse Air Brake Co., has organized an "Automation and Systems Section." The new group, under supervision of Frank T. Pascoe, will coordinate design, development and application of automatic control systems in conjunction with other sections of the Research and Engineering departments, in the field of automatic, semi-automatic or remote control for railroad operation.

OBITUARY

Gustav Metzman, 73, who was president of the New York Central from 1944 to 1952, died April 11 at Roosevelt Hospital, New York, after a long illness.

Charles E. Miller, 77, retired assistant engineer of maintenance, Chicago & North Western, died March 31 in Highland Park Hospital, Highland Park, Ill.

R. W. Richardson, retired division engineer, Chicago & North Western, Madison, Wis., died April 1.

NEW HAVEN BRIDGE

(Continued from page 38)

At the time of the fire, 40 daily scheduled freights moved through Cedar Hill's two humps—9 to and from Boston, 10 to and from Springfield, 7 to and from Bay Ridge (New York City), 6 to and from Oak Point (New York) and 8 to and from Maybrook. In addition, there were local freights on the eight routes in and out of Cedar Hill.

Cedar Hill was built (in the '20's) with considerably more capacity than is normally required today. The first reaction of New Haven management to the loss of the westbound yard bridge was to shift operations to the eastbound yards. Double-tracked Bridge 280 became the main route between the yard and New Haven, and the westbound hump was closed down.

In several months of test operation, it became apparent that there were some advantages in consolidating all operations on the east side of the yard. It also became apparent that the advantages were offset by train delays. Overtime to road crews alone helped wash out potential savings.

When F. J. Orner moved up as new chief of operations (RA, Feb. 1, p. 32), one of his first acts was to order a replacement for Bridge 348. The engineering department, which has responsibility for 80-odd timber trestles crossing similar tidal streams, was ready with plans for a pre-stressed, pre-cast concrete structure. Although new to New England, this method of construction has been used successfully elsewhere (RA, Jan. 18, p. 109).

With design and supervision remaining the function of NH Chief Engineer H. W. Jenkins and his associate, A. E. Cawood, the construction contract went to C. W. Blakeslee & Sons of New Haven.

To form a 15-ft deck for ballast and trackwork, five pre-stressed box beams, three-ft wide, were laid side by side. Seventy-six such beams completed the 288-ft deck. Supporting the structure, 101 pre-stressed concrete piles 80 and 90 ft long, were driven into clay subsoil. Single-track in its present form, the bridge can be expanded to double track.

There are a number of reasons why New Haven engineers say they like the pre-stressed and pre-cast concrete structure for tidal trestles. The new bridge, because of its resistance to salt corrosion, is expected to have a long service life. Reinforced concrete, of course, eliminates fire hazards. And not least, when the job has to be done in a hurry in winter weather on the New England seaboard, pre-casting saves time. Bridge 348 was completed on March 28, seven weeks after the first pile was driven.

A⁺dlake



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prevented any plate cutting for **117** months

"Bird 7-Ply Duck Burlap Pad, Coated. 117 months of service, outer rail, long 4½ degree curve. This pad had a good seal and was in good condition."

This unbiased report of the AREA, based on tests conducted on the Louisville and Nashville Railroad near London, Kentucky is further evidence of the effectiveness of Bird Self-Sealing Tie Pads in reducing tie costs.



East Walpole, Mass.

The underplate wood of this tie is as sound today as it was when the Bird Self-Sealing Tie Pads were installed 117 months ago — moisture and abrasive materials have not penetrated the effective and durable seal of the pad with the tie.

The tie pads themselves are structurally sound and good for many more years of effective service.

Don't take our word for it. See it for yourself on page 820 of the AREA Proceedings, Vol. 60, in a report beginning on Page 800.



In-track
experience
proves . . .

BIRD TIE PADS

save up to
\$1000.00
per mile
per year

MARKET OUTLOOK *at a glance*

Carloadings

Loadings of revenue freight in the week ended April 9 were not available as this issue went to press.

Loadings of revenue freight for the week ended April 2 totaled 598,031 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS For the week ended Saturday, April 2			
District	1960	1959	1958
Eastern	92,001	93,487	80,109
Allegheny	113,630	114,999	89,523
Pocahontas	48,999	46,273	38,247
Southern	117,351	111,065	105,939
Northwestern ..	64,013	62,683	57,491
Central Western ..	111,494	113,771	98,251
Southwestern ..	50,543	48,322	46,687
Total Western Districts	226,050	224,776	202,429
Total All Roads	598,031	590,592	516,247
Commodities:			
Grain and grain products	51,016	46,717	49,316
Livestock	3,699	5,168	4,773
Coal	98,922	91,610	85,154
Coke	10,909	10,883	5,362
Forest Products ..	39,660	36,765	33,579
Ore	27,179	21,588	13,869
Merchandise l.c.l. ..	38,944	43,228	47,214
Miscellaneous	327,702	334,633	276,980
April 2	598,031	590,592	516,247
March 26	600,926	604,392	532,273
March 19	581,477	603,885	532,997
March 12	560,230	596,180	539,127
March 5	557,607	595,475	544,374
Cumulative total, 13 weeks	7,577,596	7,557,753	7,021,024

PIGGYBACK CARLOADINGS.—

U.S. piggyback loadings for the week ended April 2 totaled 11,282 cars, compared with 8,072 for the corresponding 1959 week. Loadings for 1960 up to April 2 totaled 134,472 cars, compared with 93,014 for the corresponding period of 1959.

IN CANADA.—Carloadings for the 10-day period ended March 31 totaled 99,747 cars as compared with 67,410 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Mar. 31, 1960	99,747	43,856
Mar. 31, 1959	84,492	40,193
Cumulative Totals		
Mar. 31, 1960	843,968	385,660
Mar. 31, 1959	828,516	355,573

New Equipment

FREIGHT-TRAIN CARS

► *Atlantic Coast Line.*—Ordered 200 70-ton hoppers and 100 50-ton box cars from ACF for September delivery.

► *Colorado & Southern.*—Ordered 10 70-ton Airslide covered hoppers from General American.

► *Detroit, Toledo & Ironton.*—Ordered 120 70-ton hoppers from Greenville Steel Car at a cost of \$1,043,400. Delivery is scheduled for June.

► *Northern Pacific.*—Ordered 25 70-ton gondolas from Ortner for delivery third quarter 1960.

SPECIAL

► *March Bad Order Ratio 1.7% Lower Than Last Year.*—Class I roads on March 1 owned 1,675,313 freight cars, 46,487 less than a year ago, according to AAR report summarized below. Bad order ratio was 1.7% lower than March 1, 1959.

	March 1, 1960	March 1, 1959	Change
Car Ownership	1,675,313	1,721,800	—46,487
Waiting repairs	124,969	157,870	—32,901
Repair ratio	7.5%	9.2%	—1.7%

LOCOMOTIVES

► *Indian Iron and Steel Co.*—Ordered ten diesel-electric industrial locomotives (four of 550 hp, six of 275 hp) from General Electric at a cost of over \$750,000.

New Facilities

► *Duluth, Missabe & Iron Range.*—Current construction projects include diesel facilities and a 36-car infrared ore thawing plant at Two Harbors, Minn. (RA March 7, p. 40).

► *Missouri Pacific.*—Current projects not previously reported include construction of one-story addition to office building at 7th and Cerre streets, St. Louis, Mo., \$124,100; construction of truck-rail facilities at Kansas City, Mo., \$243,465, and at Dupon, Ill., \$188,500; track, signal and bridge work between Poplar Bluff, Mo., and Newport, Ark., \$342,600; and reconstruction of bridges at Hufsmith and Highlands, Tex., and Basile, La., at a total cost of \$477,710.

► *Norfolk & Western.*—Is installing CTC on 198 miles of former Virginian tracks between Princeton, W. Va., and Abilene, Va.

► *Santa Fe.*—Ordered CTC equipment from Union Switch & Signal Division of WABCo. for installation between Maine and Seligman, Ariz., 67 miles.

Is Piggyback Standardization

By **JOHN E. WIGHTMAN**

General Manager
Trailer Train Company

Seventy-seven years ago the railroad industry was widely hailed for adopting "standard" time. What the railroads really did, of course, was establish four different time zones for the nation and call the composite result Standard Time.

I believe the many people who today are pressing for "standardization" in rail equipment, particularly piggyback equipment, may do well to keep this historic lesson in mind. It is, I think, the best answer any railroader can give right now to the often asked question: "Is absolute piggyback standardization possible?"

I am sure that we in our company are not alone when we say standardization of equipment is extremely important to continued growth of piggyback transportation. This was one of the three primary objectives of TTX when it was formed four years ago. The others were flexibility through pool operation, and efficiency through high utilization.

However, our standardization goal, as originally conceived, was not solely a mechanical one. It also included an operating consideration aimed at making interchange practical.

Four years ago about 32 railroads were offering some form of piggyback service. Equipment then being used was a good example of the traditional independence of railroads. There were standard flat cars, modified flat cars, converted gondola cars, and special piggyback cars. Some were end loaded, some were side loaded, and some were

loaded by overhead cranes. Tiedowns came in almost as many varieties as there were engineers and designers. Many systems required special attachments, usually different, on the truck trailers themselves. The result was that interchange among the 32 railroads was at best impractical and often completely impossible.

Thus when TTX came into being with the objective of making interchange practical, some standardization was immediately necessary. Railroads had had the practical experience with many designs of piggyback which was a great help.

But in choosing the first equipment, TTX founders set only two fixed principles:

1. Cars should be able to carry every type of trailer in general use in the trucking industry, without modification, and

2. Cars should be designed for end loading from the standard ramps which have been characteristic of railroading for generations.

That these principles were sound is best illustrated by the fact that they have not been changed while the TTX fleet has grown from 400 to more than 4,000 cars.

Many sub-changes have been made, however. The first cars were 50 ft and 75 ft long and had cumbersome jack-and-chain tiedowns. Today 90% of the company's cars are equipped with the ACF hitch which Trailer Train's mechanical committee helped develop. Similarly, guide rails, bridge plates, floor construction, as well as many other features have been improved and refined. Even the length of cars has

been changed—all the newest units being 85 ft long.

These modifications, while important, did not alter the concept of interchangeability—that the cars can carry any type trailer, and they can all be loaded and unloaded at the same ramps. Thus, the standardization policy is really one of compatibility rather than arbitrary uniformity. We feel that future developments in piggyback equipment, insofar as possible, should be compatible with the equipment already in use.

Consistent with this policy, TTX is constantly searching for new equipment and improvements in existing equipment, both through the activities of our own mechanical advisory committee and also through equipment manufacturers.

Let me emphasize, however, that our company would welcome greater uniformity in equipment. Certainly we would like to have one type of car design that would carry every piggyback shipment and meet every carrier's individual needs. But the design of such equipment presents many challenges. Six of them are listed at the bottom of this page.

Obviously, no car on the market today meets all these requirements. I hesitate to predict when such a car will be designed. The matter of clearance alone is sufficient to give design engineers a headache. If this problem could be completely solved by some form of depressed floor (and this is not as simple as it sounds), would the resulting car be efficient for containers? The question of whether the car should carry one or two trailers is complicated by the possibility that longer trailers may come into widespread use.

These are just a few of the obstacles which challenge any designer trying to build a "universal" piggyback car today. Nevertheless, the future potential of piggyback as a substantial form of traffic for railroads certainly would seem to make this challenge worth accepting.

In the four years since Trailer Train was founded the number of roads offering piggyback has grown steadily. At the same time, variations in design of piggyback equipment have greatly decreased. Today the AAR reports there are about 11,000 piggyback cars in service or on order. Thirty-eight per cent of these are TTX cars, and an estimated 30% are individually owned but compatible with our design. This means that almost 70% of the total fleet is suitable for interchange operations—a vast improvement over the situation four years

6 WAYS TO A STANDARD PIGGYBACK CAR

1. It must be able to carry conventional highway trailers of all types—present and future—without modification;
2. It must be able to carry conventional containers and/or demountable bodies;
3. When loaded, the car must be low enough and narrow enough to meet all overhead and curve clearance restrictions;
4. It must provide maximum operating efficiency in terms of loading, unloading and other terminal costs;
5. It must be economical to build and maintain, and
6. It must be compatible with at least the majority of piggyback equipment now in use.

Possible?

ago. The remaining cars are chiefly assigned to captive operations on individual roads. While these cars may be relatively efficient so long as the operation remains captive, I am convinced the growing volume of interline piggyback movements is going to sharply limit the developments of non-compatible equipment in the future.

Trailer Train's mechanical committee will actively continue research into further improvements in design of piggyback equipment. We are presently working on lower-level designs which may meet most of the clearance restrictions now facing some of our members. New designs, however, must be compatible with our existing equipment so there will be no sacrifice in efficiency or flexibility when such cars are added to our fleet.

It is our hope that the varied needs of railroads for piggyback equipment will ultimately be fulfilled by a minimum number of car designs, all compatible with one another. The challenges are many, but if creative engineering is backed up by far-sighted management the rewards to the entire railroad industry can be almost limitless. In this sense, the eventual standardization in piggyback equipment may become as great an accomplishment as was the adoption of "standard time" by the railroads.

Florida Passenger Traffic Up Sharply in First Quarter

Passenger chiefs of both the Seaboard Air Line and the Atlantic Coast Line report fat increases in passenger traffic to and from Florida for the first quarter of 1960—and both are confident they're getting back a lot of travellers who temporarily defected to the airlines.

For the first 10 weeks of the year, Seaboard passenger business was running 18% over 1959 (which itself showed a 9.5% increase over 1958).

Meanwhile, Coast Line's New York-Florida "East Coast Champion," "West Coast Champion" and "Florida Special" are running 20.6% ahead of 1959. And the "City of Miami" and "South Wind" are coming into Florida from Chicago with loads running 7.2% above last year.

Says Seaboard GPTM J. R. Getty: "People are discovering there's a better way to get to Florida than being shot through the air in a galvanized ashcan."

Editors Afraid

IOWA CITY, IOWA

I have just had a unique and somewhat confusing experience. The itinerary goes like this:

- March 27-30—Attended Railroad Public Relations Association seminar on public—labor—management relations at Highland Park, Ill.

- April 5-6—Covered opening of arbitration hearings in BLE wage case.

- April 7-8—Sat in on operating brotherhoods' institute on labor-management problems at the University of Iowa.

Unique? Well, to the best of my knowledge, Railway Age was the only organization represented at all three gatherings.

Confusing? More than a little. Seldom have I heard men describe essentially the same problems in essentially the same language—and arrive at almost totally dissimilar conclusions.

Industry solvency—or the lack thereof—is probably the outstanding example. On April 5, Howard Neitzert, counsel for the carriers, told the BLE arbitration board that a sizeable segment of the industry can't afford to pay existing wage rates, let alone an increase. The record, he said, shows that 25% of Class I roads posted net income deficits in one or both of the past two years.

Just three days later, Eli Oliver, economic adviser to the brotherhoods, mounted the rostrum at Iowa City and declared flatly that "there is just no truth to the railway corporations' constant plea of poverty."

If one salient impression emerged from listening to management and labor discuss their problems, it was this: The carriers face a tremendous challenge in holding public acceptance for their position in the face of stepped-up union counter-activity — particularly at the local level.

But labor, too, has a problem in promoting activity locally. Item: I talked with one top carrier personnel officer at Highland Park who thinks that union propaganda "hasn't fooled the employees. They know featherbedding exists." Item 2: On a basis of material presented, the Railroad Public Relations Association conferees came away better prepared to talk up the rules issue than did the brothers at Iowa City.

Ops at the local and general chairman level don't seem intolerably worried by the rules situation as it stands. They're annoyed by National Railroad Adjustment Board affairs. They're concerned about the effect of Landrum-Griffin on their own responsibilities. But wages? One fireman put it this way: "Oh, we'll get whatever the Engineers get. We know that. It's happened before, it'll happen again." And rules? Well, big steel's capitulation on the rules issue was a morale booster for the rank-and-file (for those who really care, and the boys tell of some who would trade rule rights for a few cents increase in basic rates). Moreover, there's some tendency to dump the rules fight in the lap of the grand lodge—although brotherhood officers are hard at work to convince the members of the value of grass roots effort on the rules issue.

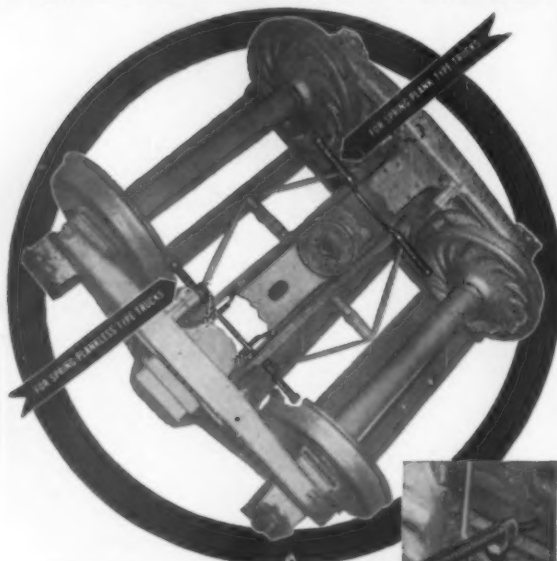
At both the RPRA seminar and the BLE-BLF&E-BRT-ORC&B-SUNA institute there were vigorous discussions of "why public relations?" Why, in view of the relative insulation separating emergency board members from direct public responsibility, should public opinion count for so much? Particularly, why should so much effort go into development of a public understanding, when certain of the brotherhoods have often refused to settle on emergency board recommendations unless a bit more sweetening was added?

And the answer, of course, lies again at the local level (primarily) in the power of public opinion to sap the will to resist. It's the same sort of grass roots opinion which can mould a course of action in Congress — in the event crisis should precipitate legislation.

It's significant that although the brothers applauded Secretary Mitchell's plea for both sides to quit fighting in public, they came back next day with a discussion of public opinion and membership communication. The BLF&E's Ed Gilbert (moderating the panel) and the AAR reached a measure of agreement on the issue. Said Mr. Gilbert: "What affects railroads affects the entire country and . . . is of particular interest to most citizens." Said the AAR: "It (the work rules issue) is . . . too vital to the public interest to shut off an open discussion."

—Gus Welty

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The Gripco Brake Beam Safety Support provides the greatest safety at lowest cost. Its dependability has been proven over years of actual service. Gripco Safety Supports are low in original cost, low in application cost and low in maintenance cost, even after years of service.

ENGINEERING IMPROVEMENTS

1. One design fits both 5'-6" and 5'-8" wheel base trucks.
2. One rod length and one spring length. One interchangeable casting fits both spring plank and spring plankless trucks.
3. Ideal for interchange repairs. New design permits easy and fast applications under all conditions. Nuts need not be removed to apply or remove the support.



SPRING-PLANK TYPE



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(Safety Loops Included)

OUTSTANDING FEATURES

1. An inexpensive trouble-free support for Rebuilt Car Programs.
2. Designed for spring plank and spring plankless trucks. Spring plankless trucks require safety loops which can be bolted, riveted or welded to the bolster.
3. Supports the brake beam in the event of brake beam or hanger failure.
4. Holds brake beam in horizontal position.
5. Holds brake shoe in proper position in relation to the periphery of the wheel.
6. The brake release feature pulls brake shoes away from wheel contact instantly when brakes are released.
7. Prevents unnecessary wheel and shoe wear caused by dragging brake shoes.
8. GRIPCO supports can be removed and reapplied without removing nuts; therefore nuts are furnished in proper position.
9. Brake beams, rods, and levers are held in position under spring tension thus reducing false movements, chattering and wear of hangers, hanger pins and brake heads.
10. Can replace as a billable repair any support except A.A.R. recommended practice (angle-riveted and welded).

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As in railway signal service, NICAD batteries for diesel locomotive starting are coming into ever-increasing use because of their outstanding reliability and economy. Call NICAD. Representatives in principal cities.

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NICAD

TRADEMARK

NICKEL CADMIUM ALKALINE STORAGE BATTERIES

MOVIES HELP YOUR SALES

(Continued from page 15)

train service employees on use of train radio.

- Made time and motion studies on installation of journal stops and on wheel change-out.

- Produced 35mm color slides for the Frisco hospital.

- Done black-and-white color aerial work to illustrate industrial growth and available on-line industrial sites.

- Produced, for industrial engineering, films on the road's tie plant and diesel shop at Springfield, Mo.

Film and audio-visual bureau chiefs on other major roads can point to equal versatility in the jobs they handle and the departments they serve.

Santa Fe, for example, recently released a 16mm color-sound film "All the Way"—a graphic presentation of many major services which the road offers shippers. Sales promotion of this type is a major objective of the department's production work—but Santa Fe has also been active in public service and employee training-motivation film work.

About 65 films have been produced in the public service field since the film program was started before World War II (and last year Santa Fe public service films were shown to a non-TV audience of about 3,500,000 persons). Loss and damage prevention and safety have received major attention in the employee training field—and Santa Fe's advertising department has become skilled in production of slide films for freight loss and damage prevention, safety, traffic and industrial meetings.

Union Pacific has long been strong in film work—particularly in the areas of passenger travel promotion and agricultural motion pictures. The territory served and the service provided give UP (like Burlington and a number of other western lines) a ready-made jumping off point for passenger films. And the same is generally true of agricultural work. UP's 14 agricultural films last year set a new record: 2,025,234 persons saw the motion pictures in more than 27,000 general showings. In addition, 159 TV showings were made to an audience estimated at almost 34,000,000.

Industry associations are also moving in the direction of film presentation of ideas and principles. The Illinois Railroad Association recently completed a color-sound motion picture showing the job railroads do for the people of Illinois and the handicaps that work against doing an even better job. Association officers think they have

an excellent local-level public relations tool. They're handling distribution through a commercial service and are urging member roads to sponsor purchase of more prints for the pool.

Perhaps this comment from one road's photo department keys the expected growth of audio-visual work:

"I believe management is becoming increasingly aware of the motion picture and audio-visual materials as excellent communications tools for the general public and employees—and, if we desire, for stockholders and directors.

"The usual method of approach when we communicate ideas or differ-

ences of opinion is to let the facts speak for themselves, by printing them in a letter or brochure. This method offers the easiest and cheapest solution to a communications problem—but there are many people who are more prone to think in the language of emotion rather than of cold logic. Here lies the advantage of film and audio-visual material over other media.

"The motion picture, slide film, recording and the rest—because of their scope in both picture and sound—can more readily dramatize an emotion . . . This is a case for audio-visual presentation."

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You Ought To Know...

"For Sale: One Passenger Car Factory." Interested buyers contact Pullman-Standard. The 50-year-old Osgood Bradley plant at Worcester, Mass., acquired by P-S in 1930, is on the block. Completely modernized in 1946, the plant has been on a stand-by basis for over a year. Faced with a dwindling passenger car market P-S has decided to close up shop in Worcester.

Western Pacific has reached a compromise agreement with the Internal Revenue Service on two pending income tax claims. A 1952 claim stemmed from bond interest paid under a 1944 Plan of Reorganization. The second claim was asserted in 1955 over losses sustained by a wholly-owned subsidiary. The settlement increased WP's working capital by \$3,456,000.

Urban and suburban transit problems and solutions will be discussed at a seminar April 26-28 at the Knickerbocker Hotel in Chicago under sponsorship of the Railway Systems & Procedures Association.

First passenger increase since 1953 was recorded last year by the Long Island, the nation's busiest passenger railroad. The increase was from 73.6 million passengers in 1958 to 73.9 million in 1959.

New York's subway-car situation is "serious enough to require drastic action," the Transit Authority has told Mayor Robert Wagner. New financing plans must be worked out "if funds for new cars cannot be found through the usual methods," said the Authority. The comment was made following a Coverdale-Colpitts survey that found the subway system safe but antiquated.

Sale of 41 miles of Lehigh & New England road to Jersey Central Lines has been approved by directors of the two companies. ICC approval will be required to consummate the agreement. Lines the JCL wants are concentrated in the cement and anthracite coal regions of Pennsylvania plus the cities of Allentown and Bethlehem. As for the remaining 129 miles of road, "We are in no position to say at this juncture what will eventually be done," said C. Millard Dodson, chairman of Lehigh Coal & Navigation Co., the L&NE's parent company.

A proposed merger of Pacific Inter-mountain Express and U. S. Leasing Co. has been dropped, apparently because of inability to reach agreement on a basis for exchange of stock. Under a plan tentatively approved, the merger would have been carried out through formation of a new company.

With new low rates in effect April 9, both C&NW and Soo Line have started moving iron ore off the Gogebic Range—C&NW to Escanaba, Mich., and Soo Line to Ashland, Wis. North Western, which also moves Menominee Range ore over the Escanaba dock, had hauled 35,000 tons of Gogebic ore to the port through April 11, and expected boat loading operations to begin later in the week. Soo Line, preparing for arrival of the first ore boat April 16, expected to move about 625 carloads into Ashland last week. Soo said the movement shows that Ashland and the railroad are "very much in the ore business . . . despite rate adjustments designed to alter historic traffic patterns."

A new all-transistorized solid-state electronic computer is being readied for installation in Santa Fe's general office building at Topeka, Kan. Testing has begun on necessary programming to direct the new 7070 computer which will receive data from electronic devices in key cities throughout the Santa Fe system.

London-to-Moscow through train service is scheduled to start May 29. Round-trip fare (including sleeper) will be around \$196.

Milwaukee Road Flexi-Van equipment continues to turn in impressive mileage records. Against a box car average of 18,000 miles per year, F-V flats are moving at a rate of 80,000 miles—and cars in mail service between Chicago and Wisconsin-Minnesota points are clipping off miles at a rate of 101,000 per year.

Last steam locomotive to be built by British Railways came off the line last month. BR now has 14,231 steam locomotives, 484 main line diesels, 1,405 diesel switchers and 90 electric engines. By 1963 BR expects to have 2,300 main line diesels, 2,000 diesel switchers, 200 electric locomotives, and only 7,000 steam locomotives in service.

Tugboat dieselization has been completed by the Pennsylvania. Last of PRR's coal-fired tugs in New York Harbor were retired with delivery of seven new diesel-drive tugboats that cost \$3,000,000.

Dissatisfaction with the Department of Commerce transportation report (RA, March 21, p. 31) has caused Seatrain President John L. Weller to resign from the department's Transportation Council. He said the report "demonstrates the same bias toward the political objectives of the would-be monopolists in the railroad industry which characterized the unlamented Weeks Report."

"The 100 Greatest Advertisements" (second revised edition, Dover Publications, New York, \$2.25) includes five celebrated railroad ads: Lackawanna's "Phoebe Snow" (extolling the virtues of the Road of Anthracite); Boston & Maine's "That's a H—I of a Way to Run a Railroad!" (a candid explanation of bad weather delays); New Haven's "The Kid in Upper 3" (a tribute to the World War II soldier—"our most honored guest"); Chesapeake & Ohio's "A Hog Can Cross the Country Without Changing Trains—But You Can't!"; and Southern Pacific's "A Short Course in Railroadng—for Airline Executives" (correcting airline claims that it's cheaper to travel by air than by rail).

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by John G. Glover

This authoritative new book presents an up-to-date treatment of the principles of management. It presents a systematic approach to the subject with broad coverage of the field from the underlying philosophy of management to the work-saving potential of automation. Thorough treatment of the basic principles of management makes the book invaluable for both the student and the younger executive. More advanced materials on such subjects as research resources, budgetary control, linear programming and automation provide a strong appeal for the seasoned executive who seeks an authoritative and compendious statement of the more recent developments in management techniques. 1958. 406 pp. illus. 6 x 9. Cloth. \$6.50

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► Diversify ... or Stagnate

There was a full-page advertisement in the Wall Street Journal the other day by the Dayton Rubber Company, which has changed its name to the Dayco Corporation. The advertisement explained the reason for the new name as follows (in part):

"Time was when the one-field company was the most evident form of organization in industry. Today, it is rapidly falling into the limbo of outmoded things. Diversification has become a basic principle of sound modern management.

"From a maker of fruit jar rings and garden hose, we have grown into something more than a rubber company. Today we market literally thousands of products for home, business and industry."

The principal railway equipment and supply concerns have already diversified their products. A recent issue of *Printer's Ink* magazine reported on the degree to which diversification of products has become a major trend, energetically pursued by most progressive industries. A camera manufacturer has expanded into aviation and missile equipment. A materials handling firm has invaded the field of hydraulic pumps. A tobacco manufacturer has gone into the candy business, on the side.

In a recent address, A. G. Anderson, head of Socony Mobil's traffic department and a customer of all types of transportation, emphasized the public interest in authorizing and encouraging rail-

roads to provide service by methods of movement other than rail.

There is no one informed about transportation who does not believe that closer collaboration and traffic interchange among the several types of transportation is urgently needed in the public interest. But there are those who believe, or pretend to believe, that effective "integration" can be obtained by the through routing of traffic, and that common ownership of several kinds of transportation is not necessary or desirable. These defenders of limitations on railroad progress overlook the fact that a "department store of transportation," providing movement by all methods in combination, would give a variety and quality of transportation service that would be something entirely new for the shipping public. And department store transportation would no more put "specialty shop" transportation out of business than retail department stores have put haberdashery shops out of business.

Railroads must keep pace with the times by diversifying their operations. They need to do so in the interest of their patrons, and in that of their employees and owners—as well as in the national interest. Their customers want them to expand, in the interest of improved and more economical service. Only their competitors—enjoying a politically protected monopoly—object.

► Is Mr. Laney Out of Step?

We can understand—even though we cannot share—the impatience of Chief Guy Brown with Local Chairman Laney of the BLE at Birmingham, who spoke out of turn on the "fireman off" issue (RA, April 11, p. 9).

Mr. Laney expressed the view that "fireman off" should be accepted, as a long-range program—with present employees protected in their jobs, allowing the jobs to fade away by attrition. This is the agreement arrived at in Canada. It would not help much in insuring the future of a union of locomotive firemen, but it would avoid any hardship whatever to individual firemen.

It appears that Mr. Laney is to be punished for speaking his mind—since generals are seldom inclined to encourage efforts by their subordinates to make a "separate peace" with the opposition.

The fact remains, however, that Mr. Laney's

attitude toward restrictive working rules is neither surprising nor unusual, among railroad union men. Thousands of them, we have reason to believe, share Mr. Laney's point of view. Even Chief Brown himself has come close to saying much the same thing, although not in such specific language.

The prevalence of understanding on the part of many railroaders in the ranks, of the harmful effect of restrictive working rules, affords strong justification for the temperate tone of management's representatives in discussing these rules.

Persistent good will toward individual employees—coupled with relentless insistence that uneconomic restrictions be terminated—can work both railroads and unions out of their present mutual jeopardy. Retention of present rules is little short of suicide for employees and employers alike.



Four-span railroad bridge over Dallas-Fort Worth Turnpike...

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